Testimony of Jonathan Spalter President and CEO, USTelecom before the House Energy & Commerce Committee's Communication & Technology Subcommittee "Legislating to Connect America: Improving the Nation's Broadband Maps" September 11, 2019

Chairman Doyle, Ranking Member Latta, and 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 proudly represents innovative broadband providers and suppliers 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 smaller companies, cooperatives and entrepreneurs—all providing advanced services to markets, urban, rural and everywhere 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. Ensuring that all communities are connected to broadband is a deeply shared, bipartisan American objective which is why the nation's broadband companies have invested \$1.7 trillion of their own capital since 1996-\$80 billion in 2018 alone—to upgrade and expand the nation's digital infrastructure. As a result, over the past decade, broadband access to rural homes has risen 71 percent.

This hearing also is timely in light of the Federal Communication Commission's (FCC) open rulemaking to reform the process it uses to collect data on broadband availability, and related proceedings underway, that will be critical to broadband deployment in rural America for at least the next decade, if not longer. One such rulemaking is focused on enhancing broadband availability reporting mechanisms by improving the Form 477 reporting requirements to make them more granular and efficient. Another proposes to allocate over \$20 billion to connect the remaining Americans unserved by broadband over the next ten years. These rulemakings will significantly impact the future of connectivity and prosperity for rural communities in America.

USTelecom's members have enjoyed a strong partnership with government through the FCC's current Connect America Fund (CAF) programs which have helped 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 for deployment 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 still remain on the wrong side of the connectivity gap. For our part, USTelecom members have connected much of rural America for decades and

stand ready to work with you and our partners throughout government to once and for all close this gap.

Part of the challenge is that our nation lacks a comprehensive map indicating precisely where high-speed broadband service is available and, most importantly, where it is not. 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 and our partners developed, and recently completed, the Broadband Mapping Initiative pilot.

I am pleased to report to you today that based on the results of this pilot, we now know without any doubt that our shared goal of deploying a fully national, verifiable, transparent, granular and accurate map of America's broadband availability is not only achievable—it can be done quickly and cost-efficiently, concurrent with any new broadband programs currently being contemplated by the federal government.

Why a New Broadband Map?

Until recently, the FCC collected deployment data from broadband providers by census block via its Form 477. Unfortunately, location data on homes and businesses are not accurately reflected by census block or other available data. Furthermore, if a provider is able to serve a single location in a census block, then the FCC considers every location in that block "served." This creates an overstatement of served locations and helps contribute to the rural broadband gap. 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 where 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 identify where scarce federal support for broadband deployment should be allocated. In fairness to the FCC, the Form 477, initially established nearly 20 years ago, was not designed with this objective in mind. Fortunately, the FCC recently launched a program to require more granular broadband reporting through its Digital Opportunity Data Collection. The National Telecommunications and Information Administration (NTIA) also has launched a multi-state pilot to improve broadband mapping.

What is needed is not just more granular reporting, but also reliable information about how many homes and business have yet to be served. Creating a granular database of all broadband serviceable locations will provide policy makers a more accurate picture of where scarce government support should be targeted and allow providers the opportunity to invest those resources with specificity.

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 available for the areas up for bid. While successful, some USTelecom members' firsthand experiences with CAF was the impetus for working together to find an improved solution for obtaining more granular mapping data.

After working with innovative broadband companies and associations across the country, having discussions with Congress and other key federal and state-level government stakeholders, USTelecom launched the Broadband Mapping Initiative pilot to quite literally "map the gap" in broadband availability in the United States. In conjunction with our partners at ITTA and the Wireless Internet Service Providers Association, our pilot involved multiple companies of different sizes and technology types, including AT&T, CenturyLink, Chariton Valley, Consolidated, Frontier, RiverStreet, TDS, Verizon, and Windstream among others. Our mission was to create a consistent national dataset with the specificity policymakers and consumers have been demanding.

Our goal was to harness the most effective *new* technologies, mapping methodologies, and newly available datasets to identify all broadband serviceable locations using a single methodology and provide a harmonized reference point for broadband reporting. This had to be done quickly, efficiently, and in the most cost-effective manner. Once we started this endeavor, we realized that by using a combination of new technologies, we could produce a granular view of broadband serviceable structures that had not previously been available to any entity or agency trying to produce a coverage map of broadband access. We were confident this project would be a truly unique and eye-opening approach to identifying locations and providing the underlying dataset, on top of which providers would report.

We succeeded. Working in Missouri and Virginia with our vendor CostQuest, within a four-month period we developed a comprehensive database of all broadband serviceable locations—and a roadmap for a collaborative government-led effort to expand the system nationwide. We were able to utilize new digital resources (both open source and proprietary), including satellite imagery and digitized parcel and land attribute data. These datasets were combined and organized by conforming addresses, removing duplicates, and using managed crowdsourcing to review records for accuracy.

The results of the project reveal pockets of unserved locations that previous efforts failed to identify. Currently used estimates of census location counts are incorrect 48% of the time, with those inconsistencies both over and under inclusive. One factor for the omissions can be attributed to existing discrepancies in the reported location and the actual location of serviceable structures. In fact, in Missouri and Virginia, 61 percent of the locations were off by 7.5 meters, and an additional 25 percent were off by over 100 meters. At first glance this may not seem critical, but the project also found 23 percent of the locations that were off by 100 meters were placed in the wrong census block. This is extremely important as one misidentified location can leave an entire census block ineligible for funding.

We now have irrefutable evidence that this mapping methodology is scalable and achievable in a timely and cost-effective manner nationwide. We are ready to hand it off to our government partners to ensure agencies, policymakers and providers are empowered with the specific data needed to connect our entire nation to the power and promise of broadband. With this data, every single dollar of federal broadband support can be accurately targeted and effectively deployed to close any remaining coverage gaps. We believe a broadband serviceable location fabric like the one we created in Missouri and Virginia can underpin a contemporary, tailored and updatable broadband map that can serve as the foundation for all future broadband spending decisions that pinpoint the unserved.

For instance, the location fabric can be the foundational mapping tool for the FCC as it undertakes a rulemaking to develop the next phase of Universal Service Fund support, called the Rural Digital Opportunities Fund (RDOF). We are pleased to see the FCC has proposed adopting a broadband-

serviceable location tool as part of its Digital Opportunity Data Collection and we look forward to working with it as well to see that become a reality. If Congress or the FCC acts expeditiously, the nationwide location fabric data can be readily available as a resource to government policy makers and the carriers seeking to bid in the RDOF auctions. Together, we can ensure no unserved American community, family, or enterprise will be left out of new broadband support programs because of misguided reliance on mapping methodologies-and reporting processes-that are insufficiently granular and accurate in pinpointing where broadband is available, and where it is not.

Congressional Action

USTelecom and our members are pleased Congress is demonstrating a committed interest in the importance of creating a nationwide broadband map. The legislation before us today proves the desire to solve this problem is as bipartisan as it is significant. Multiple Members of Congress have introduced various legislative proposals aimed at producing meaningful improvements to information collected by government agencies and how that information is applied to spur deployment and achieve real results.

We are most supportive and enthused by the principles contained within the bipartisan H.R. 4229 "Broadband DATA Act" and H.R. 4227 MAPS Act. Together, they would wisely combine multiple datasets to produce a granular-level fabric of data that can be used to pinpoint the location of the unserved. Thank you Congressmen Loebsack, Latta, McEachin and Long for introducing such assertive and thorough pieces of legislation that give clear and concise direction to the FCC. We urge the Committee to pass this legislation and for all of Congress to see that this legislation becomes law expeditiously so this data is available not only for government agencies and providers to make informed decisions, but to benefit the consumers and communities we all serve.

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, the FCC and the Administration to improve broadband mapping, a critical step toward closing the digital divide, and ensuring all Americans have the opportunity to fully benefit from our nation's continuing global digital leadership.

Thank you again for this opportunity.