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before the

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Subcommittee on Communications and Technology

"Closing the Digital Divide: Broadband Infrastructure Solutions"

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Chairman Blackburn, Ranking Member Doyle, Members of the Subcommittee—thank you for having me here. And thank you for your commitment to bridging the digital divide. My name is Joanne Hovis. I am president of CTC Technology & Energy, a communications engineering and planning consultancy serving the public sector.

I am also CEO of the Coalition for Local Internet Choice, a non-profit entity that brings together public and private entities that believe solving our nation's broadband challenges requires a full range of options. And this includes locally-driven efforts to deploy networks and create public-private collaboration.

As we look forward to Super Bowl Sunday, I suggest today that our country's drive to bridge the digital divide is a critical test of our ability to develop a winning strategy on one of the most important playing fields of the 21st century.

My comments focus on two critical questions about this essential effort. My first question is, do we actually have a winning strategy? Much of the current discussion here in Washington seems premised on the idea that a winning broadband strategy will smash so-called barriers, such as environmental permitting, local process, and costs of access to public facilities.

The premise is wrong. In reality, the fundamental reason we do not see comprehensive broadband deployment throughout the United States is that areas with high infrastructure costs per user, particularly rural areas, fail to attract private capital. This is not surprising. Nor is it a value judgment. It is simply how private investment works. If return on investment is low or nonexistent, the investment will not be made.

To solve this, state, local, and federal governments can take steps to improve the economics of broadband deployment in areas where investment has been insufficient. These areas include not only rural communities, but also underserved urban areas such as small business locations in cities and suburbs, as well as low-income areas where adoption is low and incumbents see no return that justifies network upgrades. Particular attention and support must be directed to those areas; without such efforts, private dollars will continue to flow primarily to the most profitable areas.

A better game-plan would involve these plays:

- First, support public-private partnerships that ease the economic challenges of constructing rural and urban infrastructure
- Second, incent local efforts to build infrastructure—ones that private service providers
 can use—by making bonding and other financing strategies more feasible, potentially
 through reduced interest payments or expanded use of tax-exempt bonds
- Third, target meaningful infrastructure capital support to rural and urban broadband deserts, not only to attract private capital but also to stimulate private efforts to gain or retain competitive advantage
- Fourth, empower local governments to pursue broadband solutions of all types, including
 use of public assets to attract and shape private investment patterns, so as to leverage
 taxpayer-funded property and create competitive dynamics that attract incumbent
 investment

- Fifth, require all entities that benefit from public subsidy, including access to public assets,
 to make enforceable commitments to build in areas that are historically unserved or underserved
- And, maximize the benefits of competition by requiring that all federal subsidy programs
 are offered on a competitive and neutral basis for bid by any qualified entity

Such strategies directly address the core reason the digital divide persists: lack of return on investment in many areas of the country.

Let me be very clear why the current strategy doesn't squarely face the challenge. Current efforts are focused on reducing the private sector's costs of doing business, such as by removing local processes, waiving environmental protections, and forcing local communities to subsidize carrier access to public property. All of this simply makes more profitable the already profitable areas of the country. Reducing those requirements does not fundamentally change the economics of broadband deployment in areas where return-on-investment is challenging—because the local processes and environmental and historic protections are such a small part of the economics of reaching and serving a rural area. Rather, at best, these efforts tinker at the margins of broadband economics; at worst, they distract from the key issues and misdirect resources.

¹ Please see the declaration and report written by my colleague, Dr. Andrew Afflerbach, for the Smart Communities Siting Coalition. http://www.ctcnet.us/wp-content/uploads/2017/05/Streamlining-Deployment-of-Small-Cell-Infrastructure-by-Improving-Wireless-Facilities-Siting-Policies.pdf. This report, which has been filed in multiple FCC proceedings and never countered or disputed by industry participants, discusses how reducing local processes and fees will have marginal impact on rural broadband deployment. It suggests, rather, that local coordination, public-private planning, and partnership are tested means of enabling deployment.

If we want to solve deployment issues in rural and low-income areas, we must target our solutions to those areas, and the solutions we choose must be adequate to the task. One-size-fits-all approaches will not bridge the digital divide because they effectively provide most of their benefit to providers in better-served areas that don't need incentives, without requiring the providers to invest some of their windfalls in more challenging areas. In other words, legislation or regulatory activity that purports to remove so-called barriers like local processes and fees may make for more profitable carriers in well-served areas. But they won't be sufficient to incent deployment in rural and urban broadband deserts.

Furthermore, if these strategies are premised on the idea that removing so-called barriers will lead to rural deployment of the emerging wireless technologies known as "5G," it's critical to know that no credible engineer, market analyst, or carrier is claiming that 5G deployment is planned or technically appropriate for rural areas. This is because 5G, which is still in developmental stages, is a wireless technology for very fast communications over very short distances. No wireless carrier would use 5G to serve low-density rural areas, any more than a team would focus on short-yard plays when far from the end zone, behind at the end of the fourth-quarter. If the goal is to attract private capital to rural communities, making wireless deployment more profitable in high-return metropolitan markets is exactly the wrong way to do it.

In summary: Doubling down on existing broadband investment patterns by making them even more profitable will not close this nation's digital divide. Rather, this approach is like moving the ball a few inches and calling it a touchdown.

My second question about our digital divide strategy is: Do we have the right players on the field? Let me suggest that local governments have proven themselves most valuable players in creating and incenting broadband deployment for many years—and that it's counterproductive to vilify localities based on the evidence-free assertion that local efforts and local processes restrict or disincent private deployment.

The assumption that the federal government is more **motivated** to enable deployment of this critical economic development infrastructure ignores the immediacy of the broadband need and the digital divide for local officials. And the assumption that the federal government is more **competent** to develop strategies to incent broadband deployment ignores the experience of the past decade, which demonstrates that local governments, given the opportunity, will apply creativity, local resources, physical assets, and diligence to try to solve broadband problems. For example, when Google Fiber first got started, more than 1,100 communities offered access to infrastructure, data, and other help to try and attract the company.

And they are not alone. Hundreds of localities have reached out to companies like AT&T and other incumbents, C-Spire, Ting Internet, Metronet, ALLO Communications, and many others to offer what amount to economic development packages and other incentives in return for commitments to deploy broadband infrastructure. Local collaborations are in formation between public and private sectors in hundreds of communities, to the benefit of both. The federal and state governments should not disrupt them.

Make no mistake: It is in areas where localities have been free to use their creativity, public assets, and legal authority to incent opportunity where we have seen some of the most robust broadband deployment. Observe the small towns in the Tennessee Valley that are

connected with ubiquitous community-owned fiber optics; the Google Fiber cities where incumbents, led by AT&T, have greatly increased their upgrade investments to react to the threat of competition; the communities in Mississippi that competed to attract C-Spire investment; the Indiana towns that developed economic development packages to attract Metronet; and so many others. The data are clear: The areas of the country with the best infrastructure and the liveliest competition are areas where localities have been able to engage in addressing their broadband needs based on local strategies and local needs.

Is it wise or appropriate for the federal government to interfere with those and many other potential local initiatives? Is the federal government better able to understand how to work with companies to meet both private and community needs? And is it really accurate to assume that industry giants like AT&T and Verizon cannot ably negotiate with localities—and require the intervention of the federal government to protect them?

Broadband is an existential issue for many local governments. No one recognizes better than an elected local official the importance of broadband to the economic vitality of a community, and its attractiveness for residents, workers, and businesses.

In short, it's counter-productive to tie the hands of the public officials—the very people who have the greatest incentive to solve these problems effectively and efficiently.

Let me share a few examples of the local motivation and creativity I see throughout the country:

In Spring Hill, Kansas and Pikeville, Kentucky, local communities are seeking to deploy
fiber optic infrastructure to enable private sector service provision and competition as
part of a broader economic development strategy. In Pikeville, the goal is to replace the

- declining coal economy with a coding economy, which is possible only with robust and plentiful broadband.
- Seattle has sought ideas from the private sector and has developed strategies for enabling wireless broadband service to low-income communities and users; the City is considering strategies to incent companies to serve lower-income parts of the City.
- In Gallup, New Mexico, the city's utility seeks to deploy infrastructure for public safety that will also enable private sector services in an area where private sector infrastructure deployment has not emerged.
- San Francisco is considering establishing an innovative public—private partnership that would ensure deployment and provision of ubiquitous best-in-class services with particularly attractive and affordable pricing for the 150,000 San Francisco residents who are not currently able to purchase existing high bandwidth products.
- In Michigan, a number of rural townships that are unserved with broadband are seeking to build broadband infrastructure in their rights-of-way and partner with private entities for service provision. A local non-profit, the Michigan Broadband Cooperative, formed to work with and coordinate among the townships so that they can learn from each other and build sustainable partnership strategies.
- In Sublette County, Wyoming, and Huntington, West Virginia, the local governments are seeking to deploy infrastructure to business districts to enable private sector services in an area where private sector infrastructure deployment has not emerged. Bowling Green, Kentucky has done exactly that: the city built fiber infrastructure to businesses and has enabled local companies to compete in the global marketplace.

- Boston has developed an innovative partnership with an open access fiber and wireless
 infrastructure provider in which the City incented new, open fiber deployment by
 leveraging the needs of schools and public safety facilities for fiber-based services.
- Rural Queen Anne's County, Maryland has been working with local incumbents seeking partnership opportunities to support broadband deployment.
- New York City late last year released a request for information seeking industry ideas for how the city and private entities can collaborate to bridge the considerable digital divide in which low-income New Yorkers have fewer broadband choices and challenges affording high bandwidth options where they exist. In a clear indication of the potential for city-led public-private collaboration, the city received more than three dozen substantive responses.
- In Wilson, North Carolina, the public utility extended gigabit internet to rural areas in its electric footprint. It enabled a large family farm to export its sweet potatoes to the European market by meeting Europe's high food monitoring requirements. At the same time, the utility was the only carrier to help the 600-home rural town of Pinetops with free connectivity to the local church and shelter during the 2016 flood following Hurricane Matthew.
- In Lafayette, Louisiana, Chattanooga, Tennessee, and dozens of other communities, local governments have developed their own advanced communications networks after finding the incumbent providers unwilling or unable to upgrade their networks in a timely manner to meet local needs.

Blaming localities for the digital infrastructure divide ignores these and thousands of other local efforts. At the same time, tying the hands of localities reduces their ability and incentive to work creatively with partners of all sorts to solve these problems. And preempting local authority over infrastructure assets such as light poles removes from the local toolkit incentives that localities can use to attract and shape private broadband deployment.

In short: Preempting local efforts and authority is not a winning strategy; it simply removes from the playing field one of the most important players: local government. Let me suggest that the urgency of this task, bridging the infrastructure digital divide, calls for all players to take the field.

My thanks for your consideration of my comments and for your commitment to this enormously important issue.