on

Rebuilding Infrastructure in America: Investing in Next Generation Broadband

Before the

U.S. Senate Committee on Commerce, Science, and Transportation Subcommittee on Communications, Technology, Innovation, and the Internet

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Chairman Wicker, Ranking Member Schatz, and members of the Subcommittee, on behalf of CTIA and the wireless industry, thank you for the opportunity to testify today to discuss the critical role Congress plays in ensuring that wireless broadband infrastructure can be rapidly deployed across the country.

We commend the Subcommittee for its leadership with the MOBILE NOW Act that provides a bipartisan roadmap for future infrastructure and spectrum initiatives to help create new jobs and economic opportunities. MOBILE NOW was focused on promoting the deployment of wireless networks by making more spectrum available for wireless use and facilitating deployment of infrastructure needed to support these networks. We appreciate the opportunity today to address the next set of infrastructure reforms needed to drive wireless investment.

This hearing is timely, as all four nationwide U.S. wireless providers have recently announced plans to roll out the next-generation of wireless networks, 5G, using a variety of spectrum bands. National infrastructure reform can greatly expedite the millions of jobs and billions of investment that 5G deployment will bring. Nations across Asia to Europe are investing heavily in 5G, but none of those countries can match the competitiveness of the U.S. wireless industry. Massive private investment from the national providers and regional carriers will be

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unleashed in the U.S. if the government modernizes its approach to infrastructure siting this year.

We are confident that, with this Subcommittee's continued leadership, we can win the global race to 5G—as we did for 4G. We are equally confident that reforms can help the industry expand wireless coverage throughout the country, particularly in rural areas.

The Wireless Industry Invests In Jobs and the Economy

Wireless networks and smartphones have become a central part of Americans' daily lives. There are now more wireless connections in the U.S. than there are Americans, and over the past two years, U.S. mobile data usage has more than tripled. This rapid growth has been made possible by the wireless industry's substantial investment in our nation's infrastructure. To meet consumer demand, wireless capital expenditures totaled more than \$200 billion in the past seven years alone. Overall, the wireless industry supports more than 4.6 million American jobs and contributes roughly \$400 billion annually to the economy.

Modernizing Regulation Promises 5G Investment and Jobs

The wireless industry is poised to play an even more significant role in our economy with the arrival of 5G—networks that are expected to be up to 100 times faster than 4G networks, connect 100 times the number of devices, and respond five times as quickly. This increased speed and lower latency will not only improve

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the way we communicate, but it will unlock innovations in healthcare, transportation, and manufacturing, help deliver the benefits of the Internet of Things, and enable smart communities.

The overall impact on the economy from 5G will be remarkable. Accenture reports that 5G will create three million new jobs and add approximately \$500 billion to the economy. To deploy tomorrow's next-generation networks, wireless companies will need to complement today's large towers with small cells that can be the size of a small pizza box and that will often be located discreetly on the side of a building or on a street light. It is estimated that wireless carriers will need to deploy hundreds of thousands of these small antennas over the next few years in order to meet America's consumer demand. This will require a substantial infrastructure build by wireless operators across the country at a projected cost of \$275 billion.

Congress Plays an Important Role in Promoting National Wireless Policy

Congress has long played a critical role in setting nationwide guidelines for how localities should treat requests for siting wireless infrastructure. By affirming wireless infrastructure siting as a national priority, just as it did in 1996, Congress can once again ensure Americans benefit from global-leading wireless services.

The wireless industry works in collaboration with local and state governments to facilitate the buildout of wireless infrastructure. Many are good

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partners, but too often the wireless industry today is encountering policies—long delays, onerous requirements, and excessive fees—that frustrate efforts to deploy new broadband and expand wireless coverage. In too many instances, an installation that takes one to two hours to complete requires one to two years of processing and application procedures. Some cities refuse to allow wireless installations on streetlights, and still other communities effectively foreclose deployment through excessive application and monthly fees (e.g., charging \$30,000 per pole per year, or a \$15,000 application fee per pole). The U.S. will not win the global 5G race if those timelines and costs are not significantly reduced across the country.

More than 20 years ago, Congress made clear that localities play an important role in the permitting process for wireless facilities, and that localities may not frustrate wireless deployment that will otherwise benefit our economy, and consumers. Specifically, Congress established the rapid deployment of wireless infrastructure as a national priority and set nationwide guidelines for how localities should treat siting requests. Under that federal regime, the wireless industry constructed 150,000 cell towers and rolled out service nationwide.

The transition to 5G necessitates updating Congress's guidance to localities, as the rules that applied to the infrastructure of the past are no longer appropriate to support next-generation 5G deployment. The most meaningful

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step Congress can take is to once again provide clear direction to—and guardrails around—state and local government. CTIA is encouraged that Senators Thune and Schatz have circulated a discussion draft that addresses three targeted reform areas that would make a significant difference in promoting broadband investment while preserving local authority. The discussion draft would:

- 1. Ensure Cost-Based Fees. Congress would make clear that localities retain the right to charge for access to government property, provided that such fees are fair and reasonable, competitively and technologically neutral, based on actual costs, and publicly disclosed.
- 2. Set Reasonable and Enforceable Timelines. Congress would establish a reasonable "shot clock" on handling siting applications and deeming applications granted if there is no action within that shot clock period. This could accelerate deployment while still preserving state and local authority over zoning decisions.
- **3. Clarify Permitted Conduct.** Congress would clarify that local roadblocks—like unreasonable, non-objective or discriminatory application review guidelines—are forbidden by Congress's long-standing directive to eliminate rules that "prohibit or have the effect of prohibiting" the provision of communications services.

These reforms, if enacted, would promote billions of dollars in the deployment of new wireless infrastructure.

The SPEED Act Will Help Modernize Federal Requirements.

Today, in order to install a new antenna or small cell, federal regulations require a cumbersome and costly federal review process that generally disregards the size or location of the new facility. For instance, wireless reviews

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under the National Historic Preservation Act, or "NHPA," and the National

Environmental Policy Act, or "NEPA," can run into the tens of thousands of dollars

per installation, even for small wireless deployments that are dramatically different

in nature than the larger deployments for which these obligations were originally

created. FCC Commissioner Mignon Clyburn has correctly noted, "treating small

cells differently than large macrocells, that makes all the sense in the world.

They're not created equal."

Yet today, NHPA mandates alone recently cost a carrier more than

\$170,000 to install just 23 small cells in a parking lot. Another provider estimates

that reviews under NHPA and NEPA comprised, on average, 26 percent of its total

small cell deployment costs last year. And these costs are increasing; one carrier

reports that these costs have risen by as much as 2500 percent in some parts of

the country since 2010. The direct costs only tell part of the story: these reviews

can take months, which add delays and uncertainty to projects, keeping

customers from enjoying the benefits of better service.

To be clear, the wireless industry supports appropriate environmental and

historic preservation review for sensitive sites and major projects. The current

regulatory structure, however, fails to reflect the different impact of new small

cells or installations in previously approved locations.

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That's why we're pleased with the common sense legislation—S. 1988—introduced by Senators Wicker and Cortez Masto, which would modernize the NEPA and NHPA review process for wireless facilities. While preserving key protections for environmentally or historically significant areas, the SPEED Act recognizes the need to modernize the process to allow antennas in public rights-of-way and where new facilities simply replace existing ones or do not significantly expand existing ones. It also recognizes that a small cell should not face the same requirements as a 250-foot tower. The FCC is also scheduled to consider reform to address modernizing NHPA/NEPA review at its March 22 meeting. CTIA strongly supports the FCC's proposed action as well.

Congress Can Facilitate Deployments on Federal Lands.

The federal government owns nearly 30 percent of the land in the U.S. and more than 50 percent of the land in the 10 most western states. The federal government also owns and manages key buildings in major cities and towns throughout the country.

Leases to place new sites on lands regulated by the Bureau of Land Management or the National Park Service can take two or three years to negotiate. Even simple lease renewals can take 12-18 months. In many parts of the nation, enhanced siting on federal lands will help wireless carriers more quickly deploy in unserved or underserved communities. Today, the process to deploy

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wireless networks on federal lands is too often opaque with different applications requirements and timelines and without guidelines to support timely deployment of new communications facilities.

We support Senators Heller and Manchin's leadership with S. 1363 to streamline and standardize the process by which broadband companies of all kinds obtain access to federal properties for siting facilities and also ensure that applications for this access are processed in a reasonable period of time. These provisions, along with use of common forms and master contracts, would bring much-needed predictability to the process. S.1363 builds on key provisions included in MOBILE NOW.

The Wireless Industry Shares Congress's Goal of Expanding Broadband's Reach

We are proud of the investment our nation's wireless providers have made to expand coverage across the country, including to rural areas, and look forward to working with Congress to continue expanding the number of Americans with access to wireless broadband. The wireless industry—including both national and regional providers—has made substantial strides in the past decade to expand wireless coverage to reach more Americans. Today's 4G LTE mobile broadband services were first introduced in the United States in 2010, and in less than eight years, 4G wireless services are available to more than 99 percent of Americans. This is a remarkable pace of deployment for a new technology in a very short

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window. And our nation's wireless footprint continues to grow. In 2016 alone,

wireless investment increased coverage by more than 150,000 rural Americans

and nearly 50,000 rural road miles.

We share the Subcommittee's desire to further expand broadband to more

Americans, and recognition of the important role infrastructure reform can play

to do so. Private capital has driven the vast majority of the expanded wireless

coverage, and there should be a renewed focus on the steps policymakers can

take—like those detailed above—to facilitate wireless providers' investments in

rural America by altering the investment calculus of some rural deployments from

uneconomic to viable. As FCC Commissioner Brendan Carr has said, reducing

the cost of building new networks can "flip the business case for [wireless]

deployments in thousands of communities in the U.S."

The government also has the ability to expedite deployment in unserved

areas through direct funding. The upcoming FCC Mobility Fund II auction of \$4.5

billion over 10 years will be an important step to reach rural Americans currently

unserved by wireless broadband. And the bipartisan budget that passed last

month included \$20 billion for infrastructure programs, including funds for the

expansion of rural broadband. Any new federal funding should consider the

increasingly critical role that mobile wireless services play in rural consumers' lives.

Greater participation by mobile wireless providers will lead to more effective use

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of public resources and deployment of high-speed broadband services to more rural areas. Any new funding should also ensure that reaching areas unserved by wireless is reflected in the program's objectives. In making funding decisions, data is key, and rural broadband is no exception. CTIA appreciates that the Senate has attempted to address this issue by passing the Rural Wireless Access Act (S. 1621), and we will continue to work with both national and regional wireless providers to ensure the FCC has information necessary to direct limited federal resources appropriately.

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The wireless industry is eager to work with this Subcommittee in a bipartisan manner to advance U.S. innovation and investment in mobile broadband. CTIA strongly supports this Subcommittee's efforts to help clear the way for 5G and expand wireless coverage. The time for addressing these issues is now. America is in a global race to 5G as China, Japan, South Korea, and the European Union are hard at work accelerating 5G deployments. As Nokia's CEO noted, "it's a neckand-neck race between the U.S. and China to see who will be the first to deploy" 5G networks. With the right infrastructure, spectrum, and other regulatory policies in place, the U.S. can win this race, and Americans can further benefit from the economic and consumer benefits that flow from continuing to lead the world in wireless. Thank you for the opportunity to testify today.