5G and Beyond: Exploring the Next Wireless Frontier

Testimony of Von Todd

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Subcommittee on Communications and Technology

Chairman Doyle, Republican Leader Latta, and Members of the Subcommittee, thank you for the opportunity to testify at today's hearing on America's wireless future.

I am testifying on behalf of Horry Telephone Cooperative, Inc., or HTC, the nation's largest telecommunications cooperative, where our owners are our local subscribers — we call them our members. For over 70 years, HTC has been the leading communications provider to Northeastern South Carolina, providing data, voice, and video services across copper, coax, fiber, and wireless technologies, to both residential and business markets, while remaining rooted in our community. We have worked to build out wireless cellular coverage to best serve our cooperative members through our partnership with a nationwide provider of advanced mobility. For purposes of today's hearing, I will focus on HTC's need for spectrum to provide the latest wireless services to meet member demand for data throughout our service area, including urban, suburban, and rural areas. I also serve on the Board of Directors for Competitive Carriers Association, the leading association for competitive wireless providers. CCA represents carrier members ranging from small, rural providers serving fewer than 5,000 customers to regional and nationwide providers serving millions of customers, as well as vendors and suppliers that provide products and services throughout the wireless communications ecosystem.

I am excited about the role that wireless plays in our future and HTC's efforts to bring the latest communications services to our members throughout our service area. And while the potential of wireless services, including 5G and beyond, is limitless, a key input needed to make that potential a reality is — spectrum. The airwaves needed to bring the next wireless frontier to life are critical, but finite resources. To expand connectivity today and support 5G and new wireless technologies in the future, carriers depend on sustainable and predictable access to spectrum. All carriers, and especially smaller carriers like HTC, must have the certainty that we can access and put additional spectrum bands to use. Congress can support efforts to ensure that all Americans have access to the latest wireless services by extending the Federal Communications Commission ("FCC")'s spectrum auction authority beyond the

end of September 2022, bringing additional bands of spectrum to the market for licensed commercial use, and making sure that after auctions conclude the winning bidders can swiftly and efficiently put those spectrum resources to use to serve consumers.

At HTC, Our Customers are Members

HTC was formed in 1952 and the cooperative is governed by a local board of directors.

Currently, HTC has over 700 employees working to provide the latest services to our over 100,000 local members. And membership has its benefits – HTC provides price and service equality across our membership and each member receives equal voting rights. As a vital member of our community, HTC supports local economic development, charities, and educational programs and initiatives. Even further, HTC returns excess revenues earned back to our members in the form of Capital Credits – to the tune of over \$153 million returned since 1979. We work hard to meet the needs and provide a high level of service to all of our members, serving a geographically and demographically diverse region that stretches from urban tourism destinations to rural farmlands.

Like other providers, the COVID-19 pandemic highlighted the critical importance of access to broadband services, and as a cooperative, HTC made efforts to provide connectivity as part of our COVID response. At the onset of the pandemic, we provided our members with \$4 million worth of bill credits and provided free internet service to student households without internet. We installed Wi-Fi hotspots at community centers and schools throughout our service area free of charge, and those hotspots are still operational today. We were also proud participants in the Emergency Broadband Benefit Program and remain participants in the Affordable Connectivity Program, with over 4,500 subscribers enrolled to date. We appreciate and thank the members of this Committee for creating and maintaining this important tool to put connectivity within reach for more of our community.

The COVID spotlight on the need for connectivity demonstrated that to close the digital divide and ensure that all Americans have access to broadband services we must utilize all types of technologies. As previously mentioned, HTC provides a full range of communications services to our members, and wireless connectivity is an important tool in our portfolio – but is one that is limited to and depends on our ability to access the spectrum resources needed to deliver those services. Wireless services are particularly important to reach more rural and impoverished areas, especially where larger companies will not expand to provide service, and more urban areas where larger companies have locked us out of delivering fiber in certain single-family communities through predatory pricing. HTC has and will continue to participate in programs established by Congress and Federal agencies to build and expand broadband deeper into our communities, and we can use wireless technologies to leverage and build upon those investments. And with an eye towards the future, we remain focused on 5G and smart applications that, because of mobility, can only be served through wireless. While fiber connectivity plays a vital role in wireless networks, without sufficient spectrum access, there cannot be wireless connectivity.

Congress Should Extend FCC Spectrum Auction Authority

The spectrum needed to provide reliable wireless connectivity is only available through license from the federal government, most typically obtained through participation in FCC-led spectrum auctions or through business transactions on the secondary market with subsequent FCC approval. Since Congress first directed the FCC to make spectrum licenses available through auction in 1993, the FCC has conducted over a hundred auctions, reallocating spectrum for commercial use while generating hundreds of billions of dollars in return for use as directed by Congress. For smaller providers, auctions have an additional important Congressional requirement to support disseminating licenses to a wide variety of applicants, including rural communications companies and small businesses. To meet this Congressional mandate, the FCC has and should continue to make spectrum available using sufficiently

small geographic license sizes so that smaller carriers have a meaningful opportunity to compete while ensuring appropriate power levels to maximize service, as well as promote rural and small business bidding credits, interoperability, and reasonable spectrum aggregation limits.

In recent years, HTC participated in the 700 MHz auction and subsequent wireless spectrum auctions since then, securing spectrum in the 600 MHz, 24 GHz, 28 GHz, CBRS, and C-Band. Each different band of spectrum has different propagation and other characteristics, and access to low-, mid-, and high-band spectrum supporting a full range of wireless services across our footprint. As a cooperative that serves a geographically and demographically diverse region, from urban tourism destinations to rural farmlands, we need access to spectrum to adequately meet the needs of both communities. In recent years, this includes expanded wireless connectivity to community centers as well as partnering with densely populated areas and smaller communities on smart technologies. As wireless services expand and power new services, including sustainability initiatives, electric vehicles, and new innovations not yet realized, wireless data use will continue to grow, and it is critical that we have access to the spectrum assets needed to support new deployments and technological advancements.

To continue to bring the latest services to market, we need to know that additional spectrum will be made available, and to do that we need to make sure that Congress does not allow FCC spectrum auction authority to expire. For HTC, this is not an abstract concept. Within our markets, there will be spectrum inventory available in the 2.5 GHz band in the upcoming Auction 108, that FCC Chairwoman Jessica Rosenworcel recently announced would begin in July. Were HTC to have access to this spectrum, it would provide HTC with increased confidence in our ability to meet the future data needs of our members and enhance our ability to compete in those markets. If Congress does not extend auction authority, and if proceedings around Auction 108 last beyond the current expiration of auction authority at the end of September, uncertainty creeps into our planning and could hamper our ability to marshal the resources needed to plan and participate in the auction. Expansion of auction authority will ensure

that carriers like HTC have the certainty needed to fully participate in the upcoming auction and invest in securing spectrum licenses.

Beyond the 2.5 GHz band, we strongly encourage Congress and the FCC to maintain a predictable and sufficient supply of spectrum to continue to meet growing wireless demands, including in low-, mid-, and high-bands, and in ways that allow smaller carriers to meaningfully participate in auctions with an opportunity to gain access to new spectrum resources. While we may not yet know the must have applications for 5G and beyond, or the bandwidth required to support them, we do know that more spectrum will be needed and that we do not want to be left behind, especially in rural areas that stand to benefit from new innovations most.

<u>Interagency Spectrum Coordination is Essential</u>

While the FCC should work to make additional spectrum bands available for wireless use, the interagency spectrum coordination process should be improved. Simply put, smaller carriers cannot afford to spend limited capital on spectrum licenses if we cannot put them to use according to service rules established ahead of the auction. To confidently participate in future auctions, we must have the certainty that we can put spectrum to use as anticipated. Recent disputes among individual executive branch agencies have presented claims of potential interference concerns after auctions have been completed, contrary to studies based on science and outside of the typical spectrum coordination processes. These claims can distract from important policy goals and undercut bidders' confidence as they rely on FCC-adopted rules to participate in an auction. Smaller carriers are not positioned for unexpected costs or other clearing challenges after the conclusion of an auction and may lack the scale and/or the resources to satisfy conditions raised after the conclusion of an auction. Additionally, companies that work to develop the equipment and services to support deployment must have the certainty needed to create and grow an equipment ecosystem.

We support efforts to improve interagency spectrum coordination and thank members of this

Committee for work to enhance and restore faith in the process, including efforts to update the

Memorandum of Understanding between the FCC and the National Telecommunications and

Information Administration. Importantly, ensuring that FCC spectrum auction authority is extended can support the FCC's role in mitigating spectrum disputes between commercial and federal users.

5G and other next generation wireless technologies have the potential to rapidly expand connectivity and improve many aspects of everyday life, particularly in rural areas. To make sure our networks can expand and meet the demands of the next wireless frontier, greater access to spectrum is essential. Congress can support making this potential a reality through extending the FCC's spectrum auction authority, working with the FCC and other federal agencies to identify additional spectrum bands that can be reallocated for commercial wireless use, and improving the spectrum coordination process to restore faith that licensees will be able to fully utilize their spectrum assets. Thank you for the opportunity to participate in today's important hearing and your leadership on these issues. I welcome any questions you may have.