Wi-Fi is at the core of Americans' lives. We use it in our homes to connect our phones, laptops, televisions, and more devices every day. We use it at work, connecting small and large businesses to customers, linking workforces, and bringing manufacturers, ports, and warehouses the latest technologies. We use it to study and learn, connecting teachers to parents and students and to infinite online resources. All of this is even more important today as Americans engage, learn, and work remotely over their Wi-Fi connections. This success depends on Wi-Fi having adequate spectrum resources, governed by pro-investment, pro-growth rules. As broadband service providers deliver gigabit speeds to homes and businesses, and more of our lives involve wireless connections to the Internet, the country needs more capacity for Wi-Fi.

Thankfully, Chairman Pai and his FCC colleagues have proposed to open part of the 5.9 GHz spectrum band to power Wi-Fi’s future success. The FCC has proposed to expand the country’s existing primary Wi-Fi band into the 5.9 GHz band, creating a widely usable 160-megahertz Wi-Fi channel that will leverage the existing and diverse Wi-Fi ecosystem to deliver remarkable gigabit speeds to Americans. And their solution can be implemented quickly.

Today, the 75 megahertz of spectrum in the 5.9 GHz band are mostly unused in the vast majority of the country. In 1999, the FCC gave the automotive industry full use of the band, for free, to deploy Intelligent Transportation Systems (ITS). For the next 20 years, the auto industry talked about deploying a technology called “Dedicated Short Range Communications” (DSRC) that would deliver safety and commercial applications in “talking cars.” But as the FCC has recognized, DSRC failed, and the automotive industry in the same time period turned to other technologies better suited to delivering vehicle safety applications, like blind-spot detection, drowsiness detection, automatic braking, and more that can be seen in almost any new car today. Auto companies never commercially deployed DSRC as they promised they would, and now we have only a handful of unsustainable government-subsidized pilot projects that have cost taxpayers almost $50,000 per radio on the road today.

Chairman Pai therefore has proposed a reasonable compromise to make gigabit Wi-Fi available to Americans in the near term while still leaving the automotive industry sufficient spectrum to deliver on their promises of safety using ITS technologies. The upper 30 megahertz of the band will be used for automotive safety applications, while the lower 45 megahertz of the band can be used for Wi-Fi. This spectrum can also be used for fixed wireless services to connect more
Americans to broadband. This plan offers a win-win and a fertile ground for all technologies to flourish.

Those 45 megahertz of 5.9 GHz spectrum can make an almost-immediate difference for better, faster, higher-capacity Wi-Fi because the band is directly adjacent to existing 5 GHz unlicensed spectrum. This band supports Wi-Fi for millions of consumer devices and critical functions like medical telemetry, airport operations, container ports, railway monitoring and logistics, and the industrial Internet of Things networks used in manufacturing and retail fulfillment. That means the country’s existing infrastructure can quickly and affordably be upgraded – in some cases with as little as a software upgrade – to deliver next-generation capacity and speeds to businesses and consumers across the country.

In the same 20 years that DSRC has languished, demand for Wi-Fi spectrum has exploded. Wi-Fi already carries a majority of Internet traffic in the United States and contributes hundreds of millions of dollars to the U.S. economy annually. And industry experts expect those figures to continue increasing; for example, Cisco estimates that as much as 70 percent of 5G mobile traffic will be offloaded to Wi-Fi.

The FCC took an important step this year to allow unlicensed operations to share access to the 6 GHz band, which will open expansive bandwidth to unleash the next generation of Wi-Fi and unlicensed innovation. While the 6 GHz band holds significant promise for the future, it will take time to develop and deploy the equipment necessary to use it on a shared unlicensed basis. Further, the FCC imposed strict limitations on Wi-Fi operating in the 6 GHz band in order to protect important incumbent operations, including limiting indoor-only Wi-Fi to power levels that can limit coverage and, for outdoor use cases, requiring devices to be controlled by a yet-to-be-developed Automated Frequency Coordination system. To be clear, the 6 GHz band alone will not satisfy the critical and growing needs of unlicensed operations in the marketplace.

The 5.9 GHz band is an essential addition to the new, shared 6 GHz band because it will create a unique, gigabit-capable channel that can be activated by as early as the end of this year. The band’s compatibility with existing Wi-Fi devices gives providers a head-start for upgrading the consumer experience. That means that, with the right rules in place this year, consumers will be able to experience gigabit Wi-Fi capabilities in their homes in a matter of months.

The FCC proved how quickly the 5.9 GHz band can improve the lives of Americans when it granted more than 100 fixed wireless Internet service providers (WISPs) temporary access to 5.9 GHz spectrum to meet growing network demands brought on by the COVID-19 pandemic.1 WISPs were incredibly successful in quickly putting the 5.9 GHz to work for the communities they serve, particularly in rural and suburban communities. For instance, Nextlink of Hudson Oaks, Texas connected 2,000 rural Texans to upgraded plans and found “tremendous success moving its gear to the 5.9 GHz band where it has operated with much less interference.” The temporary grant in the band safeguarded vital community functions and ensured Americans

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coast-to-coast were not left behind during this time of surging home and community broadband use. The need for temporary unlicensed use of 45 megahertz of spectrum in the 5.9 GHz band was so important that 78 members of the Wireless Internet Service Providers Association have signed on to this letter. Now’s our chance to convert that temporary improvement into a full-time success story for the whole country.

As Americans continue to work, learn, access healthcare, and conduct most of their lives from a distance, efforts to enhance their Wi-Fi experience are incredibly timely. The FCC’s 5.9 GHz compromise proposal is the best near-term solution to meet consumers’ growing connectivity needs and serve as a bridge and critical complement to the expanded new 6 GHz Wi-Fi ecosystem.

We ask that you encourage the FCC to move forward quickly to adopt its groundbreaking compromise proposal for the 5.9 GHz band and unleash next-generation gigabit Wi-Fi as soon as possible.

Respectfully submitted,

360 Communications, Inc.
Acadiana Wireless
Access Humboldt
Advanced Internet Service Provider
Advanced Wireless
Advantenon
Air Advantage
Air Link Internet Services
ALLvanza
Alsat Wireless
Alyrica Networks, Inc.
Amplex Internet
Aristotle Unified Communications
AU Wireless
Benton Institute for Broadband & Society
Black Mesa Wireless
Blip Networks
Bolt Internet
Bridgenet Communications
Broadband Corp
Broadband VI
BSpeedy Wireless
Cal.net, Inc.
Celerity Networks LLC

Center for Individual Freedom (CFIF)
Cherry Capital Connection, LLC
CMS Internet LLC
Community Internet Providers
Consortium for School Networking (CoSN)
Consumer Action for a Strong Economy (CASE)
Eastern Carolina Broadband LLC
Elevated Networks
Engine
Fourway Computer Products
GigaBeam Networks, LLC
GlobalVision
Grand County Internet Services
GTEK Communications
Hankins Internet Technology
InfoWest
Innovation and Prosperity Policy Institute
Innovation Economic Institute
Institute for Liberty
Institute for Policy Innovation
Intermax Networks
Internet Service, Inc.
L.R. Communications
Lakeland Internet LLC
LAN Communications Corp
Less Government
LGBT Tech
Linus Internet LLC
McMinnville Access Company d/b/a
OnlineNW & XS Media
MetaLINK
Mimbres Communications
Montana Internet Corporation
New Era Broadband, LLC
New Lisbon Broadband and Communications
New Wave Net Corps.
OACYS Technology
Open Technology Institute at New America
PennWisp, LLC
Portative Technologies, LLC
Public Knowledge
Quantum Telecommunications, Inc.
R Street Institute
Rapid Systems
Razzo Link, Inc.
REACH4 Communications
Resonance Broadband LLC
RGC Wireless
Ridge Wireless
Rise Broadband
River Valley Internet, LLC
Router12 Networks LLC
Safelink Internet
SDWISP
SignalNet Broadband, Inc.
Simply Bits
Slopeside Internet
SmartBurst LLC
Smarter Broadband
Softcom Internet
Southern Ohio Communication Services, Inc.
Taxpayers Protection Alliance (TPA)
TCCSkywire NW, Inc. d/b/a Netafy
TecInfo Communications
TekWave
Tnet Broadband Internet, LLC
Triad Wireless
Twin Wireless Internet
Wave Wireless
West Michigan Wireless ISP
Wireless Internet Service Providers Association (WISPA)
Ziplink Systems
ZIRKEL Wireless