Good morning. It is a pleasure to appear before this Committee once again, as it conducts further oversight of the Federal Communications Commission. I appreciate the opportunity to be here and welcome any questions you may have.

In approaching the current communications landscape, the Committee and the Commission have been focused on the changing nature of the industry, whether in terms of technological advancement, modern networks, or present-day markets. Under Chairman Pai’s leadership, the Commission has made a strong effort to modernize our regulations to keep pace with these changes. Make no mistake, this is hard work. However, we have made progress despite the headwinds, and I am excited to see further growth and strengthening of our nation’s communications infrastructure over the coming months and years.

In considering the many different areas of communications policy ripe for discussion at today’s hearing, I decided to narrow my testimony to four issues that are of particular importance to me: first and foremost, the need to quickly deploy more mid-band spectrum; second, the urgent need to prevent taxpayer-funded overbuilding of existing infrastructure; third, the need to end theft of 9-1-1 fees by states for unrelated programs; and finally, the need to address illegal robocalls while protecting legal communications. I am happy to answer your questions on these or other topics.

*Freeing Additional Spectrum, Especially in the Mid Bands*

The Commission continues to make great strides to ensure U.S. leadership in 5G by allocating the necessary millimeter wave frequencies. Over the past three years, however, I have focused most of my energy on crucial mid-band spectrum. There is now near universal acceptance that far more needs to be
done to free up additional mid-band spectrum given its propagation characteristics and opportunities for
global spectral harmonization.

Finding additional mid-band spectrum is extremely hard. There is no fallow spectrum, incumbent
users are everywhere, and a multitude of interested parties have different and often conflicting visions,
interests, and needs. I faced these issues head-on when I led, with the Chairman’s blessing, the process to
review and revise our 3.5 GHz rules. Today, 3.5 GHz is nearly ready to go to auction and will support
many functions, including 5G deployment. Unfortunately, software reconfiguration, the testing process,
and other issues have delayed our auctions. In turn, the priority access licenses are probably not going to
be auctioned until the second quarter of 2020, at best. And, while 3.5 GHz is a good start, current supply
cannot meet overall demand, especially since providers are seeking 100 megahertz channels. Building on
what the Chairman has already put in motion, the Commission must continue its efforts to allocate
additional mid-band frequencies for next-generation licensed services.

Highest on our priority list must be the 3.7 to 4.2 GHz band, or the C-band. The Commission
continues a deliberative process to consider the market-based approach, along with other options
presented in the record. One of my foremost concerns is to ensure that the mechanism selected allows for
the quickest reallocation of the band. I believe that the majority of relevant stakeholders are diligently
working through how best to accommodate the current incumbents and provide a sufficiently transparent
process. Further, I remain hopeful that the satellite incumbents recognize the great need for such
frequencies and are willing to part with closer to 300 or more megahertz, assuming the requisite
technology can accommodate this amount.

In addition to 3.5 GHz and C-band, there needs to be a greater effort to identify more federal
agency holdings in the mid bands for reallocation. I have suggested that the 3.45 to 3.55 GHz band be
made available for commercial use, and that additional feasibility studies be initiated to determine the
extent of commercial offerings that can be introduced in 3.1 to 3.45 GHz. This spectrum can be
combined with spectrum at 3.5 and 3.7 to 4.2 GHz to create the channel sizes required for true 5G
services. Further, we should also start looking to the 7.125 to 8.5 GHz band to ensure that there is sufficient spectrum for the many entities that want to offer 5G services.

At the same time, the Commission must also consider mid-band spectrum for unlicensed use, such as the 4.9, 5.9, and 6 GHz bands. The community serving this incredibly valuable function needs larger spectrum swaths to meet the speed, capacity, and latency expectations demanded of next-generation Wi-Fi and other unlicensed uses.

Broadband Deployment & Overbuilding Concerns, Especially in Rural Communities

One of the many things my fellow colleagues and I agree on is the critical importance of broadband infrastructure to the American people. It is hard to imagine any part of our current society that hasn’t been integrated with Internet connectivity: from education and information, to employment and health care, broadband is a key component of modern American life and has improved our standard of living in so many ways. This is true no matter the underlying characteristics of the technology used to provide digital access—wired or wireless. In fact, both serve interchangeable functions for increasing numbers of Americans and will likely continue to do so going forward.

Similarly, there is consensus among FCC Commissioners that all Americans—including those living in areas with challenging topography and sparse populations—should have the opportunity to access broadband Internet, if they wish to do so. While broadband availability has improved over the years, many unserved areas remain, and we must continue our efforts to expand access in an efficient and timely manner. That is why I have spent so much time over the years promoting better incentives and greater efficiency within our Universal Service Fund programs, and why I have repeatedly called for the implementation of the Remote Areas Fund (RAF) auction—in order to serve those Americans in the hardest to reach communities, which tend to be more rural and of lower economic status. I know that Chairman Pai is committed to this goal as well.

At the same time, I worry that the desire to expand broadband infrastructure will lead to wasteful and duplicative spending and adverse consequences for consumers. Recently, Congress allocated new
funding for broadband programs at the Department of Agriculture, and there appears to be interest in funding broadband buildout via the Department of Commerce as well. While I would reiterate my humble request from previous testimony that Congress consider the FCC’s Universal Service Fund (USF) as a primary means to distribute new funding, it is my foremost concern that any new funding go to unserved areas, rather than areas where broadband service already exists. Coordination among the various agencies and departments would be helpful, and, of course, there are new legislative efforts by members of this Committee to help facilitate this. However, coordination can mean different things to different government agencies and their employees. Only through clear legislative direction and necessary oversight can Congress ensure that funding does not duplicate existing programs and goes only to those Americans without broadband today.

Failure to prevent overbuilding can undermine providers’ existing and future investments and result in extremely problematic outcomes. In particular, providers serving hard-to-reach areas can face serious financial difficulties if a new government-subsidized provider “competes” to serve existing customers—or worse—takes only the most highly profitable customers. I have seen this situation firsthand within the Commission’s own USF program. It recently came to my attention that new E-Rate-subsidized fiber networks were overbuilding local USF-funded Texas broadband providers and stealing their anchor customers. By manipulating the contracting process to favor the bids of particular providers or self-provisioned service, some local school districts have been actively undermining local USF-supported providers’ existing investments, and as a result, making it even more difficult to serve surrounding communities where some households may lack any Internet access at all.

Ending Theft of 9-1-1 Fees by States & Territories

The next issue that I will touch upon today is one that I’ve been very vocal about for the past several years and which has caught the attention of this Committee as well: 9-1-1 fee diversion. This is a very significant problem, though not as widespread as it once was, thankfully. Every month, millions of consumers pay their phone bills and if they look closely enough, they’ll see a line item that generally
refers to 9-1-1 emergency services, though the exact wording varies by jurisdiction. In accordance with the line item, consumers appropriately expect that those funds will go toward maintaining and upgrading 9-1-1 emergency calling systems. In some states and territories, however, this money flows into the general treasury and, as a result, only some portion of the collected fees ends up going toward emergency services. On top of being downright deceptive, this is a serious public safety matter that directly affects emergency call centers and personnel, not to mention all the people who live in or visit these states who expect that when they call 9-1-1, the system is up to date. Following the FCC’s December report, the states and territories guilty of diverting these critical funds for 2017 were: New York, New Jersey, Rhode Island, Montana, Nevada, West Virginia, and the U.S. Virgin Islands.

As I noted, some members of this Committee have been outspoken on this issue as well, and I thank them for their efforts. The Commission has been issuing an annual report for the last decade, pursuant to federal law, that measures the amount of money, if any, that each state diverts, on a total funding and a percentage basis. The report also provides an assessment of whether the diverted funds were used for purposes related in some capacity to public safety or completely unrelated. You may find it shocking that the diversion rate was as high as 90 percent in one state (New York).

Beyond creating a problem of public confidence in the fee system itself, fee diversion also shortchanges the budgets of emergency call centers and has prevented much-needed upgrades. I’ve been to public safety answering points (PSAP), and I’ve met with the dedicated emergency communications professionals in many of the states subject to diversion. I can assure you that they are continually frustrated by their state politicians who do not have the will to do the right thing. However, I would be remiss if I didn’t also address the positive side of our report. There are many states and territories that have made a concerted effort to get off the list, especially in some cases where the problem was an accounting technicality, and in others where public officials simply did the right thing and rectified their

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state budget practices. West Virginia has committed to do just this. To those states and their leaders, I tip my cap, and I know that in the long run, the people in their states will be better off and their emergency communications systems will be stronger and more reliable.

It is also important to remind those states and territories that continue this despicable practice: they remain ineligible for new federal funding to modernize their call centers as the shift to Next Generation 9-1-1 occurs. NG911 will be costly, but these improvements will increase the system’s effectiveness and will be vital to saving lives. In the Middle Class Tax Relief and Job Creation Act of 2012, this Committee helped create a new grant program for 9-1-1, E9-1-1, and NG911, and the law specifically excluded states and territories that divert fees from receiving these grants.

In closing on this topic, I respectfully request the Committee’s assistance. The “name and shame” process generated by our annual report has only been so helpful. The state leaders of certain recalcitrant states—New York, New Jersey, and Rhode Island—don’t seem to care about the shaming part. Moreover, other states and territories seem to spring up after seeing a lack of substantial penalties and decide to divert for a few years to address a budget shortfall or provide new spending for a pet project. I believe new legislation is needed, in addition to what has already been introduced, and that it will take a more forceful approach to end diversion once and for all. I would be pleased to work with any Senators who are interested in this issue.

### Stopping Illegal Robocalls & Protecting Legal Calls

The final issue I will discuss is the Commission’s rightful focus on the surge of illegal robocalls in this country. These calls, many from overseas, are at best irritating; at worst, they serve to scam susceptible consumers out of their hard-earned money. Implementation of new technology should substantially reduce this menace, as will cooperation with foreign governments, but it is clear that eliminating such calls altogether is likely impossible.

In considering this issue, it is important to maintain a careful and nuanced approach. Not all robocalls are illegal or scams, and we must be precise in describing the actual problem at issue. Many
honest, legitimate businesses use automatic dialing technologies to communicate needed information to their customers and doing so is perfectly within the scope and intent of the TCPA. These legal and legitimate calls and texts include fraud alerts, flight schedule changes, school closures, delivery window delays, prescription alerts, appointment reminders, default notices, and public safety information, and share no part in the true robocall problem facing the nation’s communications networks.

In terms of illegal calls, I applaud those innovative companies and carriers that have already offered or are in the process of offering free call authentication and call blocking services to their customers. I am hopeful that the Commission’s recent Declaratory Ruling allowing carriers to block illegal and unwanted calls on an opt-out basis will help to further protect consumer interests. This includes pushing carriers to adopt expeditious processes for correcting false-positives, to ensure that legal and wanted calls are not incorrectly labeled or blocked.

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Thank you to the Chairman and Ranking Member for inviting me to testify today. I welcome any questions from Committee members related to the topics I have covered or any others that are important to you and your constituents.