MDST 3510

Media Policy Memo

A Memorandum on The Rural Digital Opportunity Fund and Closing the Digital Divide

To: Federal Communications Commissioner Michael O'Reilly

Subject: Future-Proofing the Rural Digital Opportunity Fund through Improved Data Collection Methods and Implementation of a 100/100 Mbps Standard

Commissioner O'Reilly,

As you are almost assuredly aware, the degree of the digital divide in the United States is of great concern for many constituents. *The Washington Post*, for example, has outlined why the growing gap between rural and urban broadband access is so alarming. Amid a pandemic that has shut down or put a harsh strain on innumerable businesses, schools, and healthcare offerings, the country has seen an increased reliance on internet services. Thus, an already present digital divide has been exacerbated — those who do not have sufficient internet access are left without these essential services. As of June 2020, more than 124,000 schools across the country had shifted to online-only instruction. Within these institutions, in excess of 55 million American students became entirely reliant on the Internet to learn. However, due to broadband inequality across the United States, "an estimated 12 million" of these students could not participate in online learning from home (*Washington Post*). Of course, students are not the only population negatively affected by increased internet reliance. Broadband inaccessibility worsens at the intersections of race, age, and — as is especially relevant to your work as an FCC Commissioner — geographic location (*Washington Post*).

The rural-urban digital divide has existed long before the COVID-19 pandemic; across the country, people in rural areas have access to high-speed internet at much lower rates than those in more densely-populated urban areas. Even for those rural residents whose locales technically have broadband available, few plans are actually affordable. Despite efforts by the Federal Communications Commission (FCC) to provide "universal service", there still exists no definitive solution to the digital divide (*Federal Communications Commission*).

It is important to note that inequity in rural broadband is not inevitable; it is a result of market failure. Without intervention by the FCC, the digital divide persists in these geographies because broadband companies do not see rural infrastructure as a worthy investment. It can be costly to build and implement the actual systems required to produce broadband (towers, underground wiring, etc.), and with fewer residents to utilize said infrastructure, providers don't earn the preferred return on investment that they would in more densely populated environments. This creates a lack of incentive to implement rural broadband services, leaving residents without internet access at all, or, in many cases, with inadequate access.

In light of timely pressures to improve rural broadband access, the Commission proposed the Rural Digital Opportunity Fund (RDOF). First publishing a Notice of Proposed Rule-making in August of 2019, the FCC has since moved forward with its proposal by way of a Report and Order on the Rural Digital Opportunity Fund put forth in January of 2020 (*Federal Communications Commission*). The RDOF is set to allocate 20.4 billion dollars over the next ten years to rural communities lacking proper broadband access. According to the FCC, this program is designed to "ensure that networks stand the test of time by prioritizing higher network speeds and lower latency" (*Report and Order*, page 2).

The RDOF does not represent the Commission's first attempt to subsidize rural broadband. Informed by its goal of "universal service" across the United States, the FCC oversees a Universal Service Fund (USF). Finances derived from the USF go toward providing broadband to underserved areas of the country. There are a variety of funds under the umbrella of the USF, including the Mobility Fund, Alternative Connect America Cost Model, and Connect America Fund (*Universal Service Administrative Co.*). Of particular note is the Universal Service for High Cost Areas - Connect America Fund (CAF). In essence, the CAF represents one arm of the USF. While the USF aims to improve broadband access in "underserved areas", the CAF specifically subsidizes broadband in rural geographies of the United States (*Federal Communications Commission*). The Rural Digital Opportunity Fund, then, garners its finances from the CAF (*Benton Institute*).

In a similar manner to the way CAF subsidies were allocated, the FCC has broken up implementation of the RDOF into two portions: Phase I and Phase II (*Federal Communications Commission*). With a budget of \$16 billion, Phase I launched in October of 2020. This phase took place as a reverse auction, wherein the FCC was the sole buyer and internet service

providers (ISPs) acted as sellers. If granted funding from the Commission, ISPs agreed to provide broadband services in specified rural areas, and to meet the FCC's obligations outlined by the FCC (*Benton Institute*). Phase II is set to follow up on the subsidies granted in Phase I. In the second phase of the RDOF, the FCC will allocate its remaining \$4.4 billion to areas whose broadband implementation was not completed in Phase I, as well as to "partially serviced" census blocks (*Benton Institute*). Since rural areas suffer from market failure, RDOF funding could incentivize providers to deploy broadband to areas that might otherwise be seen as a poor investment.

To determine which provider's bid they will agree to fund, the Commission set up tiered guidelines. As stated in its news release, the FCC established a bidding system which "[took] into account the combined performance tier and latency weight when assigning support to bidders competing for support in the same area" (*Federal Communications Commission, "News Release*"). Based on the speed, latency, and monthly usage of its bid, each ISP was placed into a specified tier by the FCC. Each performance tier was weighted differently, such that a "heavier" tier was more favorable by the Commission's standards.

The lowest performance tier is dubbed "Minimum". In this tier, speeds are at least 25/3 mbps, with a monthly usage allowance of at least 250 GB or the national average, whichever is higher. Bids in this category are weighted at 50. The "Baseline" performance tier offers speeds of at least 50/5 mbps, the same monthly usage as in "Minimum", and a weight of 35. "Above Baseline", which offers at least 100/20 mbps, and monthly allowance of at least 2 TB, is weighted at 20. Finally, the "Gigabit" performance tier includes speeds of at least 1 Gbps/500 mbps, and at least 2 TB of monthly usage. The "Gigabit" tier is weighted at 0. Additionally, the FCC designated specific low and high latency tiers (*Benton Institute*).

If the FCC chooses to grant a provider funding from the RDOF bid, said provider must agree to the Commission's terms. These terms are considered "obligations" in the "public interest" and must be attended to if the ISP intends to maintain FCC funding. Examples of these obligations include offering voice and broadband services at prices similar to those offered in urban markets, and complying with progress milestones of infrastructure implementation (*Benton Institute*).

Just as important as those areas which do receive RDOF funding are those which do not. The FCC is clear to exclude certain locales from receiving RDOF subsidies if they meet certain criteria. Firstly, the RDOF excludes census blocks which have already received federal funding to implement 25/3 mbps broadband services. Additionally, census blocks which already have access to 25/3 mbps broadband and voice services are not allowed to receive RDOF dollars. According to the Commission, this is to avoid "overbuilding". In the words of the FCC, already "limited universal service support" should be "awarded in an efficient and cost-effective manner", which means no further funding for regions that already meet the FCC's 25/3 mbps broadband minimum (*Federal Communications Commission*, page 7).

The impact of these funds will play out over the next decade, due to the Rural Digital Opportunity Fund's 10-year timeline of subsidization. For the many residents of rural areas who are in desperate need of proper internet access, this timeline is not enough. The FCC has also received critique from public commenters who argue that the Commission's standards are not fit for the future. One such dissenter is FCC Commissioner Jessica Rosenworcel.

Commissioner Rosenworcel made a public statement to the FCC, in which she partially approved and partially dissented to the workings of the Rural Digital Opportunity Fund (Rosenworcel). In her statement, Rosenworcel agrees that the RDOF is a step in the right direction — there is indeed a need to improve rural broadband access, and federal subsidization

is a functional way of incentivizing broadband providers to cover rural areas. However, Rosenworcel also argues that the basis of the RDOF is inherently flawed. She states, "We need maps before money and data before deployment" (Rosenworcel).

In determining how much of the country has broadband coverage in their homes, the FCC uses Form 477 Data. Form 477 is the paperwork that ISPs complete that supposedly details how many homes their broadband services reach. Notably, the FCC takes these numbers at face value — this leads to an overestimation of how many Americans actually have reliable broadband access. A census block is considered "covered" when just one home in the designated area can access broadband. Naturally, this assumes many more residents are covered than actually are. There is no regard for the affordability of this broadband, let alone the speed at which it runs in reality.

Rosenworcel claims that even the Commissioners of the FCC are aware of these flaws in data mapping. "When the very providers that seed the data behind the FCC's broadband maps acknowledge just how bad it is, it should set off alarm bells," she argues (Rosenworcel). The affordability of broadband services in rural areas is also of great concern to Rosenworcel, who posits "When two in five of us Americans are unable to afford a \$400 emergency, we need to recognize that price is a barrier for many people."

Besides her calls to reduce consumer costs, Commissioner Rosenworcel also proposed that the FCC raise its broadband speed minimum. Currently at 25/3 mbps, the minimum upload/download speed of broadband in America is quickly becoming dated. Rosenworcel argues that 100/100 mbps should become the new standard, in order to best prepare for future online needs. In addition, she criticizes the Commission for failing to address this very real future need, particularly in rural areas where technological advancements in farming will soon

necessitate 100/100 mbps as a minimum. The Benton Institute, along similar lines, posits that latency requirements should be improved if the RDOF is to truly be a sustainable option a decade in the future. *Benton* writer Kevin Taglang specifies that latency maximums should be "low enough to run interactive video applications (like videoconferencing)" if the broadband provided by the RDOF is going to actually be "future-proof".

In their Report and Order, the FCC disagrees with public dissenters who argue that the auction should be delayed until more "granular data" on rural access is available (*Federal Communications Commission*). The FCC posits that the downfalls of Form 477 data — census block overestimation, for example— "do not come into play". The Commission claims to "see no value in denying the benefits of broadband to those rural Americans we know lack service because there may be other unserved Americans living in other areas that we have not yet identified" (*Federal Communications Commission*). Clearly, there is a lack of willingness by the FCC to reassess their data collection methods. This is quite in line with FCC Commissioner Pai's pattern of siding with big corporations and heavily limiting regulation.

Beyond the outdated speed and latency minimums outlined in the Rural Digital Opportunity Fund, other dissenters put forth that disqualifying locales based on current broadband offerings is counterproductive. The RDOF guidelines will exclude areas that have already implemented a municipal broadband program, as well as those that have already received some amount of federal funding. "This decision now penalizes states that have taken it upon themselves to do the hard work of expanding broadband on their own. [The FCC] does so by adopting a policy of exclusion. Instead of partnering with these state efforts, [the FCC disqualifies] them and the areas where they have sought to extend the reach of broadband" (Rosenworcel). The criticisms of the RDOF bring to light the interests of those who hold a stake in its execution. Naturally, the very people who live in un-connected rural areas will bear the brunt of the RDOF's impact. At a severe disadvantage due to providers' unwillingness to implement rural broadband, those who live in rural areas face multiple setbacks of the digital divide. As discussed earlier, inaccessibility of online schooling is a major issue. Compounding atop this problem, there are also issues of job opportunity and access to healthcare services, for example (*Pew*). What is especially frustrating about the digital divide is that it is a direct result of the market-based approach to broadband that the United States has largely taken. So, in rural areas where a return on investment is unlikely, residents are left without the internet they need to live, work, learn, and thrive. One solution to this market failure has been municipal or cooperative broadband efforts, such as those represented by the National Rural Electric Cooperative Association (NRECA).

In response to the FCC's Report and Order on the RDOF, stakeholder NRECA submitted a public comment (*National Rural Electric Cooperative Association*). The NRECA is a public interest group that represents the interests of electric cooperatives across the United States. Electric cooperatives are not-for-profit groups that are owned by the people they serve (*Anza Electric Cooperative, Inc.*).

The NRECA encouraged the FCC to adopt a higher speed baseline for rural broadband, improving upon the current 25/3 mbps. They argue that "federal dollars for broadband deployment should not primarily go to deploy the minimum definition of 25/3 but should prioritize providers that will build high-speed networks that will meet the growing bandwidth needs for years to come" (*National Rural Electric Cooperative Association*). However, once

again, the FCC disregarded this suggestion by the NRECA, rebutting, "We decline to make any modifications to our two latency tiers" (*Federal Communications Commission*).

The FCC's neglect of NRECA interests highlights the Commission's exclusion of census blocks that utilize municipal or community-based broadband. Unfortunately, in an effort to improve the lives and wellbeing of their residents, regional members of the NRECA have, by way of the FCC's exclusionary policy, disqualified themselves from receiving RDOF funding. As Rosenworcel argues, this disqualification punishes communities for filling a very real need, while prioritizing ISP giants whose motives are purely financial.

Another stakeholder in the process is Pacific Dataport, Inc. (PDI), an Alaska-based company that represents the interests of rural communities in Alaska who lack broadband access. According to Pacific Dataport, they aim to combat "the lack of affordable broadband service in rural and remote areas of the State not adequately served by terrestrial networks" (*Pacific Dataport, Inc.*). The FCC excluded Alaska from its Rural Digital Opportunity Fund policy because Alaska is uniquely situated with quite rural geography, as well as densely populated cities that are still very spread out.

PDI strongly states its belief that if the Commission needs to offer a minimum 10-year Term of Support just to attract interested bidders, it should seriously consider whether the proposed buildout is sustainable" (*Pacific Dataport, Inc.*). In other words, PDI argues that the FCC's 10-year deal with providers is too extensive for the minimal offerings they will actually provide. The company clarifies, "Building systems that are too expensive to use forces continued subsidization." As outlined by PDI, the FCC's plan for the RDOF has faced significant criticism for being unsustainable. If the FCC plans to make locales rely on such outdated speeds, latency

measures, and monthly usage guidelines so far into the future, it will be leaving behind those it provides for quite soon after funding is utilized.

In my opinion, the Commission should proceed by creating a new committee on broadband data collection. The FCC should eliminate its reliance on Form 477 data, and instead reconstruct its mapping procedure. Rather than consider a census block coviered when one residence has access to 25/3 mbps, the FCC should turn away from provider-reported data. Instead, the FCC should count a home covered when it has access to affordably-priced 100/100 mbps service. Thus, my recommendations are twofold: 1) The FCC establish Committee on the Collection of Broadband Coverage data that does not rely on provider reports and 2) The FCC updates its speed standard to 100/100 mbps in order to more actively "future-proof" its broadband networks.

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