

**Before the
Federal Communications Commission
Washington, D.C. 20554**

In the Matter of)	
)	
Inquiry Concerning Deployment of Advanced)	GN Docket No. 17-199
Telecommunications Capability to All)	
Americans in a Reasonable and Timely)	
Fashion		

COMMENTS OF NETMOBY, INC.

NetMoby, Inc. (“NetMoby”), respectfully submits these Comments in reply to the Notice of Inquiry released on August 8, 2017 by the Federal Communications Commission (“Commission” or “FCC”) in the above-referenced proceeding seeking comment on ways to deploy advanced telecommunications capability to all Americans in a reasonable and timely fashion. NetMoby generally supports the deployment of broadband as currently defined by the FCC to all Americans as swiftly as possible, but strenuously objects to the Commission evaluating the deployment of fixed and mobile broadband combined together and not as separate and distinct ways to achieve advanced telecommunications capability for the American people. For the Commission to evaluate the deployment of fixed and mobile broadband combined together, as opposed to measuring the deployment of the two types of services separately, is a measure that will aggravate rather than ameliorate the Digital Divide that separates and discriminates against those Americans who either have no, or substandard, access to broadband or, in the alternative, cannot afford broadband, neither of which situation is acceptable in this American 21st-century society.

I. Introduction

NetMoby is a Service-Disabled Veteran-Owned Small business (SDVOSB) incorporated

under the laws of the District of Columbia, Washington, D.C. NetMoby is an emerging technology company with decades of collective experience in a myriad of technical areas most notably in all areas of wireless telecommunications. NetMoby is currently developing wireless broadband systems to rural and urban areas across the country to provide Wireless Broadband Internet Access Service (“WBA”) service to rural and under-served urban areas; hence its interest in submitting comments in this proceeding.

It is admirable that the FCC continues to explore ways in which it can accelerate the deployment of fixed and mobile broadband networks and services across America. NetMoby supports this effort, with the following specific comments to support the deployment of broadband as currently defined by the FCC to all Americans as swiftly as possible.

II. The Digital Divide Is A Terrible Crisis

The Digital Divide is real, and is a decimating force in American civilization from an economic and cultural perspective. FCC Chairman Ajit Pai recognized this in his first day in office:

One of the most significant things that I’ve seen during my time here is that there is a digital divide in this country —between those who can use from cutting -edge communications services and those who do not. I believe one of our core priorities going forward should be to close that divide —to do what’s necessary to help the private sector build networks, send signals, and distribute information to American consumers , regardless of race, gender, religion, sexual orientation, or anything else. We must work to bring the benefits of the digital age to all Americans.

Setting the Record Straight on the Digital Divide: Remarks Of Ajit Pai, Chairman, Federal Communications Commission, Washington, DC, January 24, 2017, <https://www.fcc.gov/news-events/blog/2017/02/07/setting-record-straight-digital-divide>.

Shortly thereafter, Chairman Pai expanded on those initial remarks:

In my first remarks as Chairman of the Federal Communications Commission to the agency’s terrific staff, I stressed that one of my top priorities would be to close the digital divide — the gap between “those

who can use cutting-edge communications services and those who do not.” I’ve explored that divide for myself in places like Barrow, Alaska; Los Angeles, California ; Clay, West Virginia ; and many more places. Now that I’m at the helm of the agency, I’m determined to address it.

We’ve already hit the ground running. In the first vote under my Chairmanship, I worked with New York Governor Andrew Cuomo , Senator Charles Schumer, Representative Chris Collins, and other officials to direct \$170 million in federal funding to build out broadband in upstate New York to places that are currently unserved.

In the second week of my Chairmanship, I shared with my colleagues and set votes for February 23 on two detailed proposals for closing the digital divide. One of them would direct billions of dollars — with a “b” — over a decade toward making sure that all parts of this country have 4G LTE coverage.

(Currently, there are too many gaps where your phone displays “No Service” — as I saw for myself during a recent drive from Wichita, Kansas to Des Moines, Iowa.) The other would allocate nearly \$2 billion — again with a “b” — for advancing fixed broadband service across the country. With more connectivity, more Americans than ever before will have digital opportunity.

Finally, I’ve engaged with Members of Congress about my proposal for Gigabit Opportunity Zones . Under this infrastructure plan, the government would use tax incentives to encourage the deployment of ultra-fast broadband in lower-income areas as small as an urban city block and as large as a rural county. It would also encourage entrepreneurs to take advantage of these next-generation networks by creating jobs in those areas. Gigabit Opportunity Zones would enable Americans to become participants in, rather than spectators of, the digital economy. They would be a powerful solution to the digital divide. I hope our elected officials will give the idea serious consideration.

Setting the Record Straight on the Digital Divide: Ajit Pai, Chairman, Federal Communications Commission, Washington, DC, February 7, 2017, <https://www.fcc.gov/news-events/blog/2017/02/07/setting-record-straight-digital-divide>

A. The Benefits of Broadband Are Myriad And Undeniable

The benefits of broadband are myriad and undeniable. The FCC, in its recent Multiple Tenant Environments Notice of Inquiry, itself said “High-speed Internet access is an increasingly important gateway to jobs, health care, education, and information, allowing innovators and entrepreneurs to create businesses and revolutionize entire industries.”¹ In fact,

¹ Notice of Inquiry, In the Matter of Improving Competitive Broadband Access to Multiple Tenant Environments, GN Docket No. 17-142, released June 21, 2017.

the Internet expands opportunities for commerce and strengthens our economy. A broad agenda to promote broadband access will empower Americans living in every community—from urban city centers to rural towns—with economic opportunities that will jumpstart growth in jobs and wages. For every \$5 billion invested in broadband infrastructure, 250,000 jobs are created and with every percentage point increase in new broadband distribution, employment expands by 300,000.²

B. The Congressional Mandate Is To Bring Broadband To All Americans

In 2009, Congress directed the FCC to develop a National Broadband Plan ensuring that every American has “access to broadband capability.” Specifically, the statute dictated:

“The national broadband plan required by this section shall seek to ensure that all people of the United States have access to broadband capability and shall establish benchmarks for meeting that goal. The plan shall also include:

- an analysis of the most effective and efficient mechanisms for ensuring broadband access by all people of the United States,
- a detailed strategy for achieving affordability of such service and maximum utilization of broadband infrastructure and service by the public,
- an evaluation of the status of deployment of broadband service, including progress of projects supported by the grants made pursuant to this section, and
- a plan for use of broadband infrastructure and services in advancing consumer welfare, civic participation, public safety and homeland security, community development, health care delivery, energy independence and efficiency, education, worker training, private sector investment, entrepreneurial activity, job creation and economic growth, and other national purposes.”³

² See Letter to President Donald J. Trump from U.S. Senate (Jan. 31, 2017), *available at* <https://prodnet.www.neca.org/publicationsdocs/wwwpdf/2217congress.pdf>.

³ Transportation, Treasury, Independent Agencies, and General Government Appropriations Act of 2005, Pub. L. No. 108-447, Div. H, 118 Stat. 2809 (2004).

The FCC Broadband Plan, released by the FCC on March 17, 2010 as a consequence of this Congressional instruction, states that:

Like electricity a century ago, broadband is a foundation for economic growth, job creation, global competitiveness and a better way of life. It is enabling entire new industries and unlocking vast new possibilities for existing ones. It is changing how we educate children, deliver health care, manage energy, ensure public safety, engage government, and access, organize and disseminate knowledge.⁴

C. The Promise of Broadband Remains Elusive For Many Americans

In its 2016 Broadband Progress Report⁵ the FCC states that

Significant progress in broadband deployment has been made, due in part to the Commission's action to support broadband such as through its Universal Service programs. However, the Commission finds that these advances are not enough to ensure that advanced telecommunications capability is being deployed to all Americans in a timely way.

Key findings include the following:

- 10 percent of all Americans (34 million people) lack access to 25 Mbps/3 Mbps service.
- 39 percent of rural Americans (23 million people) lack access to 25 Mbps/3 Mbps.
- By contrast, only 4 percent of urban Americans lack access to 25 Mbps/3 Mbps broadband.
- The availability of fixed terrestrial services in rural America continues to lag behind urban America at all speeds: 20 percent lack access even to service at 4 Mbps/1 Mbps, down only 1 percent from 2011, and 31 percent lack access to 10 Mbps/1 Mbps, down only 4 percent from 2011.
- 41 percent of Americans living on Tribal lands (1.6 million people) lack access to 25 Mbps/3 Mbps broadband

⁴ See FCC, OMNIBUS BROADBAND INITIATIVE (OBI), CONNECTING AMERICA: THE NATIONAL BROADBAND PLAN, GN Docket No. 09-51 (2010)

⁵ *Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996, as Amended by the Broadband Data Improvement Act*, GN Docket No. 15-191, 2016 Broadband Progress (2016 Report), 31 FCC Rcd 691 (2016).

- 68 percent living in rural areas of Tribal lands (1.3 million people) lack access.
- 66 percent of Americans living in U.S. territories (2.6 million people) lack access to 25 Mbps/3 Mbps broadband.
- 98 percent of those living in rural territorial areas (1.1 million people) lack access.
- Americans living in rural and urban areas adopt broadband at similar rates where 25 Mbps/ 3 Mbps service is available, 28 percent in rural areas and 30 percent in urban areas.
- While an increasing number of schools have high-speed connections, approximately 41 percent of schools, representing 47 percent of the nation's students, lack the connectivity to meet the Commission's short-term goal of 100 Mbps per 1,000 students/staff.

The *2016 Broadband Report* concludes that more work needs to be done by the private and public sectors to expand robust broadband to all Americans in a timely way.

III. The FCC Must Eschew Any Inclusion Of Mobile Service In The Definition Of Broadband

A. The Commission Must Not Change The Definition Of Broadband As It Relates To Advanced Telecommunications Services

The Commission notes in its Notice of Inquiry at Footnote One states that:

For simplicity in past inquiries, the Commission has sometimes used the term “broadband” to refer to “advanced telecommunications capability.” However, “advanced telecommunications capability” is a statutory term with a definition that is more narrow than the term “broadband.” See 47 U.S.C. § 1302(d)(1) (“The term ‘advanced telecommunications capability’ is defined, without regard to any transmission media or technology, as high-speed, switched, broadband telecommunications capability that enables users to originate and receive high-quality voice, data, graphics, and video telecommunications using any technology.”). As this definition makes clear while all services providing advanced telecommunications capability are “broadband,” not all broadband services provide advanced telecommunications capability.

This is a major change from prior FCC positions. For example, the prior Commission stance has been traditionally been articulated as follows:

For simplicity in past inquiries, the Commission has sometimes used the term “broadband” to refer to “advanced telecommunications capability.” However, “advanced telecommunications capability” is a statutory term with a definition that differs from the term “broadband” as it is used in other contexts. See 47 U.S.C. § 1302(d)(1) (“The term ‘advanced

telecommunications capability’ is defined, without regard to any transmission media or technology, as high-speed, switched, broadband telecommunications capability that enables users to originate and receive high-quality voice, data, graphics, and video telecommunications using any technology.”). Thus, in this Inquiry, we do not equate the term “broadband” with the statutory term “advanced telecommunications capability,” but we do necessarily consider the availability of various broadband services that contribute to advanced telecommunications capability in our analysis under the statute.⁶

The change is important because the FCC in the Restoring Internet Freedom Notice of Proposed Rulemaking states that:

101. We seek comment on the legal authority that the Commission would have in this area if we adopted our lead proposal to classify broadband Internet access service as an information service.

102. *Section 706.* We seek comment on whether section 706(a) and (b) of the 1996 Act are best interpreted as hortatory rather than as delegations of regulatory authority. Such an interpretation generally is reflected in the Commission’s approach to section 706 prior to 2010. (Footnote omitted.) The text of these provisions also appears more naturally read as hortatory, particularly given the lack of any express grant of rulemaking authority, authority to prescribe or proscribe the conduct of any party, or to enforce compliance. Although some courts have held that the Commission’s post-2010 interpretation of section 706(a) and/or (b) as a grant of regulatory authority was not unreasonable, we seek comment on whether interpreting those provisions as hortatory nonetheless is the better reading. (Footnote omitted.) Or should we maintain our post-2010 interpretation of these provisions? Alternatively, we seek comment whether section 706 reflects a “deregulatory bent,” (Footnote omitted.) and, if so, how we should interpret that with respect to obligations for regulated entities. If section 706 reflects a deregulatory emphasis, what authority does it give the Commission, particularly in situations in which capital expenditures by Internet service providers have slowed, as they have in the past year under Title II regulation? If we interpret section 706(a) as a grant of authority, does that mean state commissions would have coequal authority? If we interpret section 706(b) as a grant of authority, what would happen to any rules adopted using that authority if the Commission later found that advanced telecommunications capability is being deployed to all Americans in a reasonable and timely fashion? Are there other interpretations of section 706 of the 1996 Act that we should consider?

⁶ See *Inquiry Concerning the Employment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996, as Amended by the Broadband Data Improvement Act*, GN Docket No. 15-191, Eleventh Broadband Progress Notice of Inquiry, 30 FCC Rcd 8823, 8824 n. 3 (2015) (“Notice” or “2015 Eleventh Broadband Progress Notice of Inquiry”)

NetMoby passes no comment on the restoring Internet Freedom proceeding here. However, NetMoby objects to any attempt to broaden the definition of broadband in order to accommodate any strategy to evaluate the deployment of fixed and mobile broadband combined as opposed to separately.

IV. Any Inclusion Of Mobile Service In The Definition Of Broadband Will Result In An Unwarranted and Harmful Increase In The Digital Divide

The FCC specifically proposes in this Notice of Inquiry as follows:

According to the Pew Research Center, the percentage of Americans subscribing to fixed broadband has reached an all-time high of approximately 73 percent. (Footnote omitted.) At the same time, 13 percent of Americans across all demographic groups are relying solely on smartphones for home internet access. . (Footnote omitted.) Given that Americans use both fixed and mobile broadband technologies, we seek comment on whether we should evaluate the deployment of fixed and mobile broadband as separate and distinct ways to achieve advanced telecommunications capability. Taking into account the differences between the various services and the geographic, economic, and population diversity of our nation, we seek comment on focusing this Section 706 Inquiry on whether some form of advanced telecommunications capability, **be it fixed or mobile**, is being deployed to all Americans in a reasonable and timely fashion. Would such an inquiry best follow the statutory instruction to evaluate the deployment of advanced telecommunications capability “without regard to any transmission media or technology”? (Emphasis supplied.)

NetMoby strenuously objects to the Commission evaluating the deployment of fixed and mobile broadband combined together and not as separate and distinct ways to achieve advanced telecommunications capability for the American public for the following reasons.

The term “broadband” commonly refers to high-speed Internet access that is always on and faster than the traditional dial-up Internet access. Broadband includes several high-speed transmission technologies such as:

- Digital Subscriber Line (DSL)

- Cable Modem
- Fiber
- Wireless
- Satellite
- Broadband over Powerlines (BPL)

Mbps (Megabits per second) is the standard measure of broadband speed. It refers to the speed with which information packets are downloaded from, or uploaded to, the Internet. The Commission has established a current speed benchmark of 25 Mbps download/3 Mbps upload (25 Mbps/3 Mbps) for fixed broadband services to allow a service to technically qualify as “broadband”. Many Internet service providers, such as DSL and satellite, actually provide Internet access at a much slower speed than 25 Mbps/3 Mbps, even though they advertise this service as “broadband”.

As the Commission itself admits in the *Notice of Inquiry*:

As of the beginning of 2016, approximately 80 percent of American mobile subscribers used smartphones, up from approximately 50 percent in 2012. (Footnote omitted) As of the first quarter of 2016, about 90 percent of new mobile phones sold were smartphones, as compared to approximately 67 percent in 2012. (Footnote omitted) The Nineteenth Mobile Competition Report found that most of the U.S. population resides in an area with LTE coverage from at least one service provider and that median download speeds during the second half of 2015 ranged from approximately 8 megabits per second (Mbps) to 15 Mbps. (Footnote omitted)

This speed is woefully short of the current speed benchmark of 25 Mbps download/3 Mbps upload (25 Mbps/3 Mbps) for fixed broadband services to allow a service to technically qualify as “broadband”.

The FCC, as a result of their failure to institute programs, processes and specifications is proposing mobile broadband to be counted as broadband. The FCC can not have their figurative cake and eat it too, by artificially inflating the statistics for access to broadband, which is exactly what will result if the mobile and fixed broadband statistics are converged. The FCC last

defined broadband as 25/3 (25 Mbps download and 3 Mbps upload) and Chairman Pai has recently suggested that this definition be increased four-fold to 100 Mbps download. Now, the FCC proposes mobile service to count as broadband. However, measuring download speed for mobile service is problematic. For example, when located close to a cell, it is possible for a mobile device to achieve 35 Mbps with LTE, which is far from the 3GPP 4G standard of more than twice that speed. However, when at the cell's edge, the mobile device's distance results in greater "path fade" and consequently, lower typical LTE speeds in the 5-12 Mbps neighborhood (in which case is less than half the FCC's current "broadband" definition).

Finally, the recent proposal of the FCC to count neighboring census block areas as having the service of any particular carrier if they install ANY broadband capability in the adjacent block could include the presence of an LTE cell. In other words, if Census Block A in a rural area has an LTE cell, is the FCC now going to count the abutting Census blocks as having that carrier's service? When a block has but one choice of broadband service providers, it is currently deemed as being under-served.

When school children, adults and businesses purchase laptop and desktop PCs, their intention is to connect them to fixed broadband fiber, cable or microwave service providers – not to tether to their smartphone devices. School children or businesses cannot be expected to operate using a 5-6 inch smartphone screen to use applications such as Microsoft Word, Excel and PowerPoint. They need a full-power computer that is connected to a fixed broadband provider yielding steady speeds of at least 25 Mbps/3Mbps – not fluctuating speeds of 5 to 35 Mbps from LTE cellular mobile networks.

With a stroke of the pen, this ill-advised proposal would substantially improve the FCC's unserved/under-served statistics without actually providing any additional broadband service as

defined by the FCC itself. The FCC can then tout that they have miraculously achieved the goal of competitive broadband service in a much higher number of rural (and under-served urban) areas; the FCC would have just miraculously eliminated the long-standing problem of the Digital Divide in an administrative fashion overnight instead of remedying the Digital Divide with actual, installed broadband service.

V. Conclusion

Again, NetMoby applauds the FCC as it continues to explore ways in which it can accelerate the deployment of broadband as currently defined by the FCC to all Americans as swiftly as possible, for high-speed Internet access, to make real progress in the elimination of the Digital Divide. However, NetMoby urges that the FCC allow the provision of actual service and not statistical sleight of hand to eliminate the deleterious and discriminatory effect of the Digital Divide for all Americans.

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Respectfully submitted,

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