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March 5, 2019

Ms. Marlene H. Dortch, Secretary
Federal Communications Commission
445 Twelfth Street, SW
Washington, DC 20554

Re: GN Docket No. 18-238

Dear Ms. Dortch:

Chairman Pai's press release previewing the forthcoming 2019 Broadband Deployment Report ("2019 Report")¹ is another example of the Chairman seemingly taking unearned credit for broadband deployment trends that began long before his tenure (*see, e.g.*, Figure 2 below). But whatever credit the Chairman does or, in truth, does not deserve for recent broadband gains, that press release – and apparently the forthcoming 2019 Report – relied on erroneous data.

More specifically, the press release and seemingly the draft 2019 Report as well rely on analysis of FCC Form 477 data that includes tremendous over-reporting by a single CLEC/WISP. And the inclusion of that data results in a massive over-statement of the change in broadband deployment at the national level during 2017.

Free Press respectfully submits that this error is of such magnitude that the Commission must address it prior to adopting the 2019 Report.

When conducting our initial analysis of the December 2017 Form 477 Deployment data, we noticed that a new Form 477 filer, Barrier Communications Corporation (d/b/a BarrierFree), claimed deployment of fiber-to-the-home ("FTTH") and fixed wireless services (each at downstream/upstream speeds of 940 Mbps/880 Mbps) to Census blocks containing nearly 62 million persons. This claimed level of deployment would make BarrierFree the fourth largest U.S. ISP in terms of population coverage – an implausible suggestion, to put it mildly.

This claimed level of deployment stood out to us for numerous reasons, including the impossibility of a new entrant going from serving zero Census blocks as of June 30, 2017, to serving nearly 1.5 million blocks containing nearly 20 percent of the U.S. population in just six months time. We further examined the underlying Form 477 data and discovered that BarrierFree appears to have simply submitted as its coverage area a list of every single Census block in each of eight states in which it claimed service: CT, DC, MD, NJ, NY, PA, RI, and VA.²

¹ See "Report: America's Digital Divide Narrows Substantially," FCC Press Release (Feb. 19, 2019).

² Barrier Communications Corporation is a Form 499 Filer, as a "CAP/LEC" (competitive access provider/local exchange carrier) for the eight states listed above as well as Delaware and Massachusetts). See FCC Form 499 Filer Database, <http://apps.fcc.gov/cgb/form499/499detail.cfm?FilerNum=829837> (retrieved Mar. 5, 2019).

In other words, BarrierFree claimed to offer FTTH service with downstream speeds of 940 Mbps to 100 percent of the geographic area and 100 percent of the population of New York State, and also to 100 percent of those seven other states. BarrierFree's over-reporting in this manner not only produces wildly overinflated deployment claims for itself and these eight states: it also has a substantial impact on the putative change in deployment at the national level. Indeed, BarrierFree is claiming to be the only ISP offering service in 15 percent of all Census blocks that were listed as unserved in the June 2017 Form 477 data.

Further investigation strongly suggests BarrierFree grossly misreported its deployment. BarrierFree claims to offer speed tiers topping out at 940 Mbps/880 Mbps in all of its blocks, using both fiber-to-the-home and fixed wireless services. This speed combination is unique to Verizon's FiOS FTTH service, and Verizon is the only other 477 filer to claim such a speed tier.³ But according to BarrierFree's own website,⁴ it does not market fiber-to-the-home service at any speed. Furthermore, the maximum advertised speed for its residential fixed wireless service is 25 Mbps symmetrical.⁵

We are unable to determine exactly why BarrierFree reported in this manner, or why the Commission failed to notice this apparent grievous error before boasting about the December 2017 results in its recent press release. However, this type of over-reporting by competitive access providers is not new to the Commission. Free Press highlighted it explicitly in 2014, prior to the Commission taking over NTIA's block-level deployment collection.⁶ In fact, this issue was of such concern, the Commission issued a clarification to its Form 477 filing instructions specifically telling carriers that "would rely on the ordering or installation of a not-yet leased circuit . . . to provide service in a census block not currently served should not treat that census block as having service available."⁷ It appears BarrierFree may have ignored this directive, and listed every single Census block located in eight of the states in which it's registered as a CLEC.⁸

³ Though BarrierFree's claimed service areas overlap with a number of ILECs, Verizon is listed as offering ISP service to 50 million of the 61.5 million persons living in Census blocks where BarrierFree also claimed to offer its own service.

⁴ <https://barrierfree.us/> (last visited Mar. 5, 2019).

⁵ <https://barrierfree.us/fire-island-internet-service/> (last visited Mar. 5, 2019).

⁶ *See, e.g.*, Free Press, Reply to Opposition, MB Docket No. 14-57, at 27-28 n. 50 ("The NTIA data vastly overstates the availability of non-ILEC offerings, as it includes several CLECs that do not actually serve large portions of the areas they claim to serve, but instead report areas where they are willing potentially to serve business customers using leased ILEC facilities if such service is requested. For example Platinum Equity Inc., the parent company of MegaPath and Covad, is shown in NTIA data as serving a whopping 44 percent of the country, when this is plainly not the case. Indeed, according to the NTIA's data, Platinum Equity is allegedly the largest wired ISP in the country as measured by availability, ahead of Comcast, AT&T, Verizon, Time Warner Cable and every other incumbent cable or telco provider!").

⁷ *See* "FCC Form 477 Local Telephone Competition and Broadband Reporting Instructions," OMB Control No. 3060-0816, at 17 (Dec. 5, 2016).

⁸ This "CLEC over-reporting" problem Free Press noted in our 2014 filing, and that the Form 477 instructions address, is not the only apparent path to mass over-reporting. We note that there are several fixed wireless-only ISPs that claim to serve areas containing millions of persons: *e.g.*, Jab Wireless claimed to serve blocks containing more than 28 million persons as of year-end 2017. We have no way of verifying the veracity of such claimed deployments, but note that the standard for claimed deployment in the Form 477 instructions is too vague and lends itself to potential over-reporting. "[F]ixed broadband connections are available in a census block if the provider

In light of this erroneous reporting and resulting artifact, we checked the claims made by Chairman Pai in his press release and were able to determine that most of his statements therein apparently rely on Form 477 data that includes the false BarrierFree deployment claims:

Claim 1: “[S]ince last year’s report, the number of Americans lacking access to a fixed broadband connection meeting the FCC’s benchmark speed of 25 Mbps/3 Mbps has dropped by over 25%, from 26.1 million Americans at the end of 2016 to 19.4 million at the end of 2017.”

Reality: BarrierFree’s erroneous reporting is responsible for a substantial portion of this claimed decline in the unserved population. With BarrierFree removed from the data, the number of Americans lacking access to a fixed broadband connection at the 25 Mbps/3 Mbps threshold declined to 21.3 million, not 19.4 million (*See* Figure 1 below).⁹

Claim 2: “Moreover, the majority of those gaining access to [25 Mbps/3 Mbps fixed terrestrial] high-speed connections, approximately 5.6 million, live in rural America . . .”

Reality: BarrierFree’s erroneous reporting is responsible for a substantial portion of this claimed improvement in rural deployment. Our analysis of the data without BarrierFree indicates that 6.4 million persons gained access to 25/3-level service, not the 8.6 million implicitly claimed by Chairman Pai (*see* Claim 1). Of these 6.4 million persons, approximately 3.6 million resided in blocks that were classified as rural as of the 2010 Census. Thus, BarrierFree’s erroneous reporting is responsible for 2 million of the supposed 5.6 million newly-served rural persons highlighted in the Chairman’s press release.

Claim 3: “The private sector has responded to FCC reforms by deploying fiber to 5.9 million new homes in 2018, the largest number ever recorded.”

Reality: BarrierFree’s erroneous reporting will have a substantial impact on the counts of blocks gaining FTTH service. However, the use of the year 2018 in this claim indicates Chairman Pai is relying on third-party data, not Form 477. We question why the Commission’s Broadband Deployment Report would cite unauditable third-party data when its own Form 477 data tracks FTTH deployment. According to the historical Form 477 data, the number of households in an area with FTTH deployment increased by 2 million during 2015, by 6.6

does, or could, within a service interval that is typical for that type of connection—that is, without an extraordinary commitment of resources—provision two-way data transmission to and from the Internet with advertised speeds exceeding 200 kbps in at least one direction to end-user premises in the census block.” (emphasis added). *See id.*

⁹ We note that our population counts for December 2014, 2015, and 2016 precisely match the values reported by the Commission in the 2018 Broadband Deployment Report. However, the recent press release used a slightly different value for the unserved population, indicating the Commission has revised its prior work. *See, e.g., Inquiry Concerning Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion*, 2018 Broadband Deployment Report, 33 FCC Rcd 1660, 1686 (2018) (“2018 Report”).

million during 2016, and by 6.1 million during 2017 (excluding BarrierFree's reporting). Thus there is Commission data that seems to indicate that 2016 saw more FTTH deployment than the Chairman's cited claim for 2018. Regardless, it is foolhardy for the Chairman to claim that any new change in FCC policy was met by a fiber-deployment response, particularly given the role of AT&T's commitment to deploy FTTH services as a condition for its approval to acquire DirecTV (a condition Chairman Pai did not support).¹⁰

Claim 4: "And overall, capital expenditures by broadband providers increased in 2017, reversing declines that occurred in both 2015 and 2016."

Reality: We have repeatedly debunked Chairman Pai's reliance on manipulated aggregate capital expenditure data, to the exclusion of all other evidence, to claim declines during 2015 and 2016. And we have substantial concerns over the Chairman's willingness to see causal relationships where simple logic suggests there are none. Fortunately the 2018 Report did not mention or rely on these bogus and selective data sets, nor did it apply Chairman Pai's specious reasoning. We continue to advocate for the Commission to draw on a wide variety of information sources concerning investment decisions, including specific company statements and deployments, as well as the US Census Bureau's Annual Capital Expenditure Survey ("ACES"). The ACES data indicates capital investments in the wired telecom sector increased during 2015 and 2016, and increased in the wireless sector during 2016 after a brief lull due to the completion of the cycle of LTE deployment.¹¹

Claim 5: "The number of Americans with access to 100 Mbps/10Mbps fixed broadband increased by nearly 20%, from 244.3 million to 290.9 million."

Reality: BarrierFree's erroneous reporting is responsible for a substantial portion of this claimed increase in the population served at the 100 Mbps/10 Mbps threshold. We first note that this threshold was not used in prior Broadband Deployment Reports, and we question why it was chosen for singling out. However, with BarrierFree removed from the data, the number of Americans served at this threshold increased to 288.4 million persons, not the 290.9 million claimed by Chairman Pai (See Figure 1 below).¹²

¹⁰ *Applications of AT&T Inc. and DIRECTV For Consent to Assign or Transfer Control of Licenses and Authorizations*, Memorandum Opinion and Order, 30 FCC Rcd 9131 (2015).

¹¹ The 2015 wireless capital expenditure figures were revised downward in the March 2018 Census Release. See <https://www.census.gov/programs-surveys/aces/data/tables.html>.

¹² As we noted *supra* note 9, our population values for 2016 for the 10/1, 25/3 and 50/5 tiers exactly matched those published in the 2018 Report. Using the same methodology we determined that as of year-end 2016, there were 243.6 million persons in blocks served by a 100/10 Mbps-level ISP. In its press release, the FCC claims the year-end 2016 value was 244.3 million persons. Until we see the full report, we are unable to understand exactly why our 2016 baseline is slightly different. Though our analysis of the December 2017 Form 477 data with BarrierFree included matches the Commission's other claims.

Claim 6: “The number of Americans with access to 250 Mbps/50 Mbps fixed broadband grew by over 45%, to 205.2 million, and the number of rural Americans with access to such service more than doubled.”

Reality: We first note that this threshold also was not used in prior Broadband Deployment Reports, and we question why it too was chosen for singling out. However, we were not able to replicate the Commission’s claims for this speed threshold for either 2016 or 2017, despite the fact that our methodology produces identical results to the Commission’s claims about other speed tiers. We found that without BarrierFree’s erroneous reporting, the number of persons in blocks served at the 250/50 Mbps level went from 63.4 million at the end of 2016 to 93.3 million at the end of 2017 (largely due to continued DOCSIS and FTTH upgrades that began several years ago, *i.e.*, before Chairman Pai’s tenure). If BarrierFree’s erroneous data is included, the 2017 value for persons served at 250/50 Mbps increases dramatically to nearly 124 million (*see* Figure 1). Regardless of how the Commission calculated its findings for this speed threshold, it is apparent that BarrierFree’s erroneous reporting is responsible for a substantial portion of the Commission’s claimed increase in the population served at this level.

Free Press has not offered our opinion as to the appropriate conclusion of the central question of this year’s 706 proceeding. We do, however, believe that the analysis used to reach that conclusion must be of the highest quality. Therefore, given the obvious errors created by the use of Form 477 data that includes the blatant over-reporting by BarrierFree, we strongly urge the Commission to withhold release of the 2019 Report until this matter is resolved.

Finally, we must close where we began, on the unearned pride for broadband deployment results running throughout the Chairman’s February press release. As we see in Figures 1 and 2 below, fixed broadband deployment improvements have been remarkably consistent in recent years. Other than a portion of the rural deployments under the Connect America Fund, and those required by an older merger condition, it is questionable whether Commission policy during Chairman Pai’s tenure has had any impact on broadband deployment. Indeed, despite a once-in-a-generation corporate tax cut, capital spending was down in 2018 at many major ISPs.

This reality is yet one more affirmation that year-to-year changes in carriers’ capital spending plans are largely a function of what infrastructures they’ve already deployed, where they are individually in the technology cycle, and the level of competition they face. The notion that Chairman Pai’s actions moved these deployment numbers in any way is wholly unsupported by the evidence, and such grandstanding does not belong in Commission Reports to Congress.

Respectfully Submitted,

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Figure 1: Deployment of Fixed Terrestrial Services at Different Speed Tiers (2014–2017)

Speed Threshold (downstream/ upstream)	Population Served by a Fixed Terrestrial ISP as of:							Dec 31, 2017 Values Including BarrierFree
	Dec. 31, 2014	Jun. 30, 2015	Dec. 31, 2015	Jun. 30, 2016	Dec. 31, 2016	Jun. 30, 2017	Dec. 31, 2017***	
4 Mbps/1 Mbps	301,954,020	303,730,920	305,511,415	309,630,552	312,874,486	315,921,759	317,509,038	318,619,831
10 Mbps/1 Mbps	297,826,087	300,002,294	302,137,633	306,521,303	309,613,747	313,476,578	315,590,816	316,811,196
25 Mbps/3 Mbps	284,277,496	285,855,912	287,853,006	293,023,806	297,765,702	301,397,331	304,403,707	306,327,652
50 Mbps/5 Mbps	270,770,579	281,162,812	283,329,367	287,192,729	292,804,314	295,519,467	298,221,038	300,474,249
100 Mbps/10 Mbps	201,905,334	211,913,046	215,582,165	222,731,988	243,648,439	273,792,211	288,379,103	290,883,681
250 Mbps/50 Mbps	15,265,421	19,098,206	23,307,799	28,818,704	63,428,673	84,747,752	93,305,477	123,975,842
1000 Mbps/1000 Mbps	12,480,221	14,500,720	17,423,350	21,043,902	21,386,701	38,305,022	44,436,666	44,436,666
Total U.S. Population#	317,954,162	319,121,699	320,289,236	321,403,750	322,518,263	324,117,169	325,716,075	

Source: Free Press analysis of FCC Form 477 deployment data, for fixed terrestrial (non-satellite) deployments as of Dec. 31, 2014 (version 2); Jun. 30, 2015 (version 4); Dec. 31, 2015 (version 3); Jun. 30, 2016 (version 3); Dec. 31, 2016 (version 1); Jun. 30, 2017 (version 2); Dec. 31, 2017 (version 1). Values are based on FCC's Block-level population estimates, as reported for the 2017 release. ***Dec. 31, 2017 data excludes data from BarrierFree, a CLEC who appears to have erroneously reported offering FTTH service in nearly 1.5 million blocks, which would make it the 4th largest U.S. ISP. BarrierFree appears to have simply listed 940/880 Mbps FTTH and WISP service as available in every block located in the 8 states it reported offering service. # Values for Total U.S. population during June reporting periods are mid-year estimates based on the prior and subsequent end-year values.

**Figure 2:
Deployment of Fixed Terrestrial Services at FCC 2018 Report's Identified Thresholds (2014–2017)**

