

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

In the Matter of	)	
	)	
Connect America Fund	)	WC Docket No. 10-90
	)	
Universal Service Reform – Mobility Fund	)	WT Docket No. 10-208

**INFORMAL REQUEST FOR COMMISSION ACTION**

**RURAL WIRELESS ASSOCIATION, INC.**

Caressa D. Bennet, General Counsel  
5185 MacArthur Blvd., NW, Suite 729  
Washington, DC 20016  
(202) 857-4519

Date: December 26, 2018

**Table of Contents**

	<u><b>Page No.</b></u>
<b>Summary</b> .....	<b>i</b>
<b>I. BACKGROUND.</b> .....	<b>2</b>
<b>II. T-MOBILE’S CLAIMED 4G LTE COVERAGE IS GROSSLY OVERSTATED.</b> .....	<b>5</b>
<b>III. THE COMMISSION SHOULD INVESTIGATE BACKHAUL CAPACITY ISSUES IN THE AREAS IN WHICH T-MOBILE CLAIMED TO PROVIDE QUALIFYING 4G LTE COVERAGE AND WHETHER T-MOBILE USED PROJECTED COVERAGE FOR ITS DATA SUBMISSION.</b> .....	<b>7</b>
<b>IV. T-MOBILE FILED PROJECTED COVERAGE DATA.</b> .....	<b>12</b>
<b>V. CONCLUSION</b> .....	<b>16</b>

## Summary

RWA requests that the Commission investigate the 4G LTE coverage claimed by T-Mobile USA, Inc. as part of the one-time data collection for the Mobility Fund Phase II reverse auction process. After RWA members conducted their own drive testing of T-Mobile's coverage in their respective service areas, RWA determined that T-Mobile's data submitted to the FCC regarding its claimed coverage of these areas at 5 Mbps or greater download speeds was not accurate or supported. Based on evidence available to RWA members it became evident that T-Mobile did not have the requisite backhaul facilities to support 5 Mbps download speeds at the time it submitted its data to the FCC. It further appears that T-Mobile continued to build out areas that it counted as covered even though this build out occurred after T-Mobile's January 4, 2018 deadline for submitting actual coverage.

RWA encourages the Commission in its investigation to obtain and analyze the following information related to the timing of T-Mobile's cell sites built in rural areas in the past three years: 1) date power installed at cell site; 2) date 4G LTE RAN installed at cell site; 3) date backhaul installed at cell sites; 4) type of backhaul installed at cell sites and the capability of the backhaul facilities in place at the time to support 5 Mbps download speeds; 4) date cell sites were provisioned; and 5) date commercial service was launched at each of the cell sites.

To the extent the Commission determines that data submitted by T-Mobile has been fabricated or has been based on projected future coverage, RWA requests that the Commission consider taking appropriate action including, but not limited to, 1) barring T-Mobile from participating in the Mobility Fund Phase II reverse auction; 2) requiring T-Mobile to reimburse challengers for their costs associated with the challenge process; and/or 3) issuing appropriate sanctions for misrepresentation of information submitted by T-Mobile under penalty of perjury.

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

In the Matter of	)	
	)	
Connect America Fund	)	WC Docket No. 10-90
	)	
Universal Service Reform – Mobility Fund	)	WT Docket No. 10-208

**INFORMAL REQUEST FOR COMMISSION ACTION**

Pursuant to Section 1.41 of the Federal Communications Commission’s (“FCC” or “Commission”) rules,<sup>1</sup> the Rural Wireless Association, Inc. (“RWA”)<sup>2</sup> files this Informal Request for Commission Action (“Informal Request”) regarding the Mobility Fund Phase II (“MF-II”) Challenge Process. For the reasons discussed below, RWA requests that the Commission investigate the 4G LTE coverage claimed by T-Mobile USA, Inc. (“T-Mobile”) and require T-Mobile to resubmit its MF II coverage data using the actual coverage that it had in place during the August 4, 2017 – January 4, 2018 time frame as required by the Commission’s rules,<sup>3</sup> rather than projected coverage data that appears to have been used. To the extent the data submitted by T-Mobile has been fabricated or has been based on projected future coverage, RWA requests that the Commission consider taking appropriate action including, but not limited

---

<sup>1</sup> 47 C.F.R. § 1.41.

<sup>2</sup> RWA is a 501(c)(6) trade association dedicated to promoting wireless opportunities for rural telecommunications companies who serve rural consumers and those consumers traveling to rural America. RWA’s members are small businesses serving or seeking to serve secondary, tertiary, and rural markets. RWA’s members are comprised of both independent wireless carriers and wireless carriers that are affiliated with rural telephone companies. Each of RWA’s member companies serves fewer than 100,000 subscribers.

<sup>3</sup> See FCC, [Mobility Fund II 4G LTE Data Collection Instructions](#) (“Mobile wireless broadband providers must submit polygons in a shapefile format representing geographic coverage nationwide (excluding Alaska, but including U.S. territories) for 4G LTE deployed in each frequency band and bandwidth as of August 4, 2017, or later.”) (last visited Dec. 26, 2018).

to, 1) barring T-Mobile from participating in the Mobility Fund Phase II reverse auction; 2) requiring T-Mobile to reimburse challengers for their costs associated with the challenge process; and/or 3) issuing appropriate sanctions for misrepresentation of information submitted by T-Mobile under penalty of perjury.<sup>4</sup>

## I. BACKGROUND.

In August 2017, the Commission decided to implement a new, one-time data collection with specified data parameters tailored to MF-II.<sup>5</sup> The Commission required mobile wireless broadband providers to file propagation maps and model details with the Commission indicating their current 4G LTE coverage, as defined by download speeds of 5 Mbps at the cell edge with 80 percent probability and a 30 percent cell loading factor.<sup>6</sup>

The FCC used the 4G LTE coverage information, in conjunction with Universal Service Fund (“USF”) subsidy data, to establish a map of areas presumptively eligible for MF-II support.<sup>7</sup> The FCC released the initial eligible areas map on February 27, 2018.<sup>8</sup> On the same

---

<sup>4</sup> Pursuant to Commission requirements, carriers submitting 4G LTE coverage data were required to do so under penalty of perjury. *See Universal Service Reform – Mobility Fund*, Order on Reconsideration and Second Report and Order, WC Docket No. 10-90, WT Docket No. 10-208, FCC 17-102, at ¶ 39 (Aug. 4, 2017) (stating that “providers shall submit...a certification, under penalty of perjury, by a qualified engineer that the propagation maps and model details reflect the filer’s coverage as of the generation date of the map...”). To the extent T-Mobile misrepresented the information, it should be sanctioned. *See, e.g., California Public Broadcasting Forum v. FCC*, 947 F.2d 505 (D.C. Cir. 1991) (upholding FCC denial of a broadcast license renewal application where licensee misrepresented its reasons for darkening station); *WADECO, Inc. v. FCC*, 628 F.2d 122 (D.C. Cir. 1980) (upholding FCC disqualification of applicant for a broadcast construction permit based on applicant’s misrepresentation of its financial qualifications); *Brandywine-Main Line Radio, Inc. v. FCC*, 473 F.2d 16 (D.C. Cir. 1972) (upholding FCC denial of a broadcast license renewal application where licensee misrepresented its program plans).

<sup>5</sup> *Universal Service Reform – Mobility Fund*, [Order on Reconsideration and Second Report and Order](#), WT Docket No. 10-208, at ¶ 7 (rel. Aug. 4, 2017) (“*Second R&O*”).

<sup>6</sup> *Second R&O* at ¶ 34.

<sup>7</sup> *Second R&O* at ¶¶ 10-11, 34.

date, the FCC released a Public Notice establishing the procedures to be used in the MF-II challenge process.<sup>9</sup> In that item, the FCC determined that speed test measurements submitted to support and/or respond to a challenge to an area that is initially deemed ineligible for MF-II support must be no more than 500 meters apart from one another.<sup>10</sup> The FCC decided to assess challenges using a uniform grid with cells of one square kilometer and a “buffer” with a radius equal to one-half of the maximum distance parameter, i.e., 250 meters.<sup>11</sup> After reviewing detailed data<sup>12</sup> regarding the burden a challenger would experience as a result of these parameters, the FCC reconsidered its procedures and extended the buffer radius from 250 to 400 meters.<sup>13</sup>

The Challenge Process started on March 29, 2018, and was originally scheduled to conclude on August 27, 2018.<sup>14</sup> However, the FCC extended the challenge process deadline by 90 days to November 26, 2018 in light of data submitted by RWA regarding the significant burdens of the challenge process, including specific estimates of the amount of time required to

---

<sup>8</sup> *Mobility Fund Phase II Initial Eligible Areas Map Available; Challenge Window Will Open March 29, 2018*, [Public Notice](#), DA 18-187, WT Docket No. 10-208 (rel. Feb. 27, 2018). The FCC made minor changes to the map in late May 2018 to reflect corrected coverage by a single mobile provider and adjustments to underlying coverage and subsidy data. *See Updated Version of Map of Areas Presumptively Eligible for Mobility Fund Phase II Now Available*, [Public Notice](#), DA 18-540, WT Docket No. 10-208 (rel. May 22, 2018).

<sup>9</sup> *Connect America Fund, Universal Service Reform – Mobility Fund*, [Public Notice](#), WC Docket No. 10-90, WT Docket No. 10-208, DA 18-186 (rel. Feb. 27, 2018) (“*Challenge Process PN*”).

<sup>10</sup> *Challenge Process PN* at ¶ 24.

<sup>11</sup> *Challenge Process PN* at ¶ 24.

<sup>12</sup> *See generally Letter* from Caressa D. Bennet, General Counsel, RWA, and Erin P. Fitzgerald, Regulatory Counsel, RWA, to Marlene H. Dortch, Secretary, FCC, WT Docket No. 10-208 *et al.* (Mar. 21, 2018) (“*RWA Mar. 21, 2018 Ex Parte*”) (focusing on challenges to certain ineligible areas in Alabama, Kansas, Montana, North Dakota, Oklahoma, and Wyoming).

<sup>13</sup> *Challenge Procedures Reconsideration Order* at ¶ 4.

<sup>14</sup> The initial MF-II map of presumptively eligible areas was published on February 27, 2018, and the challenge window opened on March 29, 2018. Because the 150th day from the opening of the challenge window would fall on August 26, 2018, which is a Sunday, the challenge window was scheduled to remain open through August 27, 2018, the following business day. *See* 47 CFR § 1.4(d), (j); *Universal Service Reform – Mobility Fund*, [Public Notice](#), *Mobility Fund Phase II Initial Eligible Areas Map Available; Challenge Window Will Open March 29, 2018*, WC Docket No 10-90, WT Docket No. 10-208, DA 18-187, Feb. 27, 2018.

conduct speed tests in certain areas.<sup>15</sup>

Twenty-one Challengers submitted the results of their speed tests (showing that qualifying 4G LTE service with download speeds of 5 Mbps is not available at a given location) to the Universal Service Administrative Company (“USAC”) challenge process portal.<sup>16</sup> On December 7, 2018, Federal Communications Commission Chairman Ajit Pai announced that the agency had “launched an investigation into whether one or more major carriers violated the Mobility Fund Phase II...reverse auction’s mapping rules and submitted incorrect coverage maps.”<sup>17</sup> Further, the Commission “has suspended the next step of the challenge process – the opening of a response window – pending the conclusion of this investigation.”<sup>18</sup>

---

<sup>15</sup> *Universal Service Reform – Mobility Fund*, [Order, Notice of Proposed Rulemaking and Memorandum Opinion and Order](#), WC Docket No. 10-90, WT Docket No. 10-208, FCC 18-124, at ¶¶ 5, 8 (rel. Aug. 21, 2018).

<sup>16</sup> *Universal Service Reform – Mobility Fund*, [Public Notice](#), WC Docket No. 10-90, WT Docket No. 10-208, DA 18-1225 (rel. Dec. 3, 2018).

<sup>17</sup> [Press Release](#), *FCC Launches Investigation Into Potential Violations of Mobility Fund Phase II Mapping Rules* (Dec. 7, 2018).

<sup>18</sup> *Id.*; see also Lynn Stanton, *Pai Foresees ‘Very Busy’ Agenda for FCC in 2019*, TRDaily (Dec. 14, 2018) (stating “As to whether he was frustrated at having to suspend action in the Mobility Fund Phase II process pending an investigation of whether major carriers violated FCC rules by submitting inaccurate data on areas they already serve with 4G LTE, Chairman Pai said, ‘Look, to me, it’s not just professional, it’s personal. When I fly home to Kansas City and I drive about three and a half hours south to my hometown, I can tell you once you get to the outer Kansas City suburbs, you see the bars on your phone start to drop and soon thereafter there’s no service at all for long stretches. And I understand personally the costs to many of these communities for not having wireless coverage. During one of my trips to Mission, S.D., for example, I heard about a woman on the Indian reservation near there. She was found dead in her home, and she was clutching her cellphone. She dialed 911 38 times, but the call never went through, because she didn’t have wireless coverage. This is really a matter of life and death in some circumstances.’ Asked what the consequences should be for carriers that submitted inaccurate data, he said, ‘That’s a question that’s inextricably intertwined with the enforcement investigation that I announced last week and so I can’t comment on what the remedies or penalties might be as a result of that might be.’ In response to a question about what other ways the FCC could obtain data on coverage, Mr. Pai said, ‘Some steps have already been taken. ... Going forward we want to know that we have accurate data.’ Asked whether the Commission would delay a decision in its review of the proposed merger of T-Mobile US, Inc., and Sprint Corp. pending the outcomes of the MF-II data investigation, Chairman Pai said, ‘Oh, boy, that’s

RWA has received reports from its members that the *vast* majority of tests by RWA members of T-Mobile test points resulted in download speeds below 5 Mbps or did not register 4G LTE service at all on T-Mobile-designated handsets.<sup>19</sup> These same members spent hundreds of hours and hundreds of thousands of dollars to disprove T-Mobile’s overstated coverage – time and money that would have been better spent investing in their networks to further deploy LTE in rural America.

## **II. T-MOBILE’S CLAIMED 4G LTE COVERAGE IS GROSSLY OVERSTATED.**

The record is replete with filings by RWA and others detailing concerns about overstated coverage by Verizon.<sup>20</sup> However, only recently did RWA become concerned about overstated coverage by T-Mobile because such overstated coverage did not become apparent until after the challenge process data had been submitted by challengers and more closely analyzed.<sup>21</sup> RWA members Sagebrush Cellular, Inc. (“Sagebrush”), Panhandle Telecommunication Systems, Inc. (“Panhandle”), and Pine Belt Cellular, Inc. (“Pine Belt”)

---

a double hypothetical! I mean, not just the merger, the merits of which I can’t talk about, but also the impact that a concurrent enforcement investigation might have on any merger. Again, I haven’t announced the identities of any carriers that we might be investigating, so I can’t obviously opine about what impact that may or may not have on the transaction that’s pending.”)

<sup>19</sup> See Declaration of Mike Kilgore at ¶ 8; Declaration of Jana Wallace at ¶ 5; and Declaration of John Nettles at ¶ 6.

<sup>20</sup> See, e.g., *Universal Service Reform – Mobility Fund*; WC Docket No. 10-90, WT Docket No. 10-208, [Ex Parte Letter from Radio Frequency Engineering Firm Coalition](#) to Ms. Marlene H. Dortch, Secretary, FCC (July 5, 2018); *Universal Service Reform – Mobility Fund*; WC Docket No. 10-90, WT Docket No. 10-208, [Ex Parte Letter from Radio Frequency Engineering Firm Coalition](#) to Ms. Marlene H. Dortch, Secretary, FCC (Aug. 3, 2018); *Universal Service Reform – Mobility Fund*; WC Docket No. 10-90, WT Docket No. 10-208, [Ex Parte Letter](#) from Shawn Hanson, CEO, Panhandle Telecommunication Systems, Inc. to Ajit Pai, Chairman, FCC (Sept. 7, 2018); *Universal Service Reform – Mobility Fund*; WC Docket No. 10-90, WT Docket No. 10-208, [Informal Request of Smith Bagley, Inc. for Commission Action](#) (Oct. 18, 2018).

<sup>21</sup> [Ex Parte Letter](#) from Caressa D. Bennet, General Counsel, Rural Wireless Association, Inc. to Marlene H. Dortch, Secretary, FCC (Dec. 10, 2018) *Universal Service Reform – Mobility Fund*, WT Docket No. 10-208, WC Docket No. 10-90, (“RWA Ex Parte”).

challenged T-Mobile coverage in their service areas.<sup>22</sup> Concerns about overstated coverage by T-Mobile are borne out by RWA members' respective challenge results submitted in the FCC portal.<sup>23</sup> In *ex parte* meetings with the FCC on December 6, 2018, RWA members, *inter alia*, discussed their findings and their conclusion that the near total inability of T-Mobile to document 5 Mbps download speeds in the rural areas tested by RWA members and claimed by T-Mobile to have qualifying coverage calls into question the veracity of the original data submitted by T-Mobile prior to the January 4, 2018 deadline.<sup>24</sup>

RWA member Sagebrush, a wholly owned subsidiary of Nemont Telephone Cooperative, Inc. ("Nemont"), is a commercial mobile radio service ("CMRS") provider offering service in northeast and south central Montana, as well as portions of North Dakota and Wyoming. Sagebrush covers over 17,000 square miles, the vast majority of which is rural and remote in nature, including the Crow and Fort Peck Indian Reservations.<sup>25</sup> Sagebrush's T-Mobile speed test data collection covered a total of 443,055 test points. Of the total test points for which data was collected, 434,501 (98.07%) tested below 5 Mbps download speed or did not register 4G LTE service at all on T-Mobile-designated handsets.<sup>26</sup>

RWA member Panhandle, a wholly owned subsidiary of Panhandle Telephone Cooperative Inc. ("PTCI"), is a CMRS provider offering service in the Oklahoma Panhandle in Cimarron, Beaver, and Texas counties. Panhandle's T-Mobile speed test data collection covered a total of 1,246,009 test points. Of the total test points collected, 1,222,385 (98.10%) tested

---

<sup>22</sup> See Declaration of Mike Kilgore at ¶ 8; Declaration of Jana Wallace at ¶ 5; and Declaration of John Nettles at ¶ 6.

<sup>23</sup> See Declaration of Lynn Merrill at ¶ 5 and Attachments A, B, and C.

<sup>24</sup> See Declaration of Mike Kilgore at ¶ 8; Declaration of Remi Sun at ¶¶ 5-7; Declaration of Jana Wallace at ¶ 5; Declaration of Lynn Merrill at ¶ 6, and Declaration of John Nettles at ¶ 6.

<sup>25</sup> See Declaration of Mike Kilgore at ¶ 4; Declaration of Jerry Tilley at ¶ 4; and Declaration of Remi Sun at ¶ 4.

<sup>26</sup> See Declaration of Lynn Merrill at ¶ 5 and Attachment A.

below 5 Mbps download speed or did not register 4G LTE service at all on T-Mobile-designated handsets.<sup>27</sup>

RWA member Pine Belt, a wholly-owned subsidiary of Pine Belt Communications, Inc. (“PBC”), provides mobile telephone, SMS, and wireless broadband services in five Alabama counties (Choctaw, Dallas, Marengo, Perry and Wilcox). Pine Belt’s T-Mobile speed test data collection covered a total of 657,524 test points. Of the total test points collected, 591,908 (90.02%) tested below 5 Mbps download speed or did not register 4G LTE service at all on T-Mobile-designated handsets.<sup>28</sup>

Three challengers collected data for 2,346,588 total T-Mobile test points.<sup>29</sup> When 2,248,794 (95.8 percent) of 2,346,588 test points tested by only three challengers fail, it calls into question all of the data submitted by T-Mobile.

**III. THE COMMISSION SHOULD INVESTIGATE BACKHAUL CAPACITY ISSUES IN THE AREAS IN WHICH T-MOBILE CLAIMED TO PROVIDE QUALIFYING 4G LTE COVERAGE AND WHETHER T-MOBILE USED PROJECTED COVERAGE FOR ITS DATA SUBMISSION.**

Drive testing data coupled with a professional engineering analysis and “boots on the ground” observations obtained before and during the challenge process demonstrate that T-Mobile’s backhaul facilities in place by January 4, 2018 were insufficient to support the qualifying 5 Mbps download speeds claimed by T-Mobile.<sup>30</sup> During the MF-II challenge window, Sagebrush took speed tests in the area surrounding T-Mobile towers in both Glasgow, MT and Scobey, MT.<sup>31</sup> Upon reviewing the speed test data and noting the high number of points that tested below 5 Mbps download speed or did not register 4G LTE service at all, Sagebrush

---

<sup>27</sup> See Declaration of Lynn Merrill at ¶ 5 and Attachment B.

<sup>28</sup> See Declaration of Lynn Merrill at ¶ 5 and Attachment C.

<sup>29</sup> See Declaration of Lynn Merrill at ¶ 5 and Attachments A, B, and C.

<sup>30</sup> See Declaration of Lynn Merrill, P.E. at ¶¶ 6-7.

<sup>31</sup> See Declaration of Michael Kilgore at ¶ 9.

questioned whether T-Mobile had sufficient backhaul to support the 5 Mbps download speeds it reported to the FCC in its January 4, 2018 MF II coverage filing.<sup>32</sup> Sagebrush management, who also serve as management of Sagebrush's affiliated telephone companies, reviewed each telephone company's circuit installation records to determine if circuits had been installed to support backhaul for T-Mobile's cell sites in northeastern Montana and Williston, North Dakota.<sup>33</sup> Sagebrush also conducted a review of the FCC's Universal Licensing System ("ULS") to determine if T-Mobile had sufficient backhaul capacity to support the claimed qualifying coverage as of January 4, 2018.<sup>34</sup>

T-Mobile did not have sufficient backhaul capability, as of January 4, 2018, to support 5 Mbps download speeds in the Glasgow, Montana vicinity. Currently, T-Mobile is using a backhaul circuit at its Glasgow, Montana cell site capable of supporting 5 Mbps download speeds, but this circuit wasn't installed by the January 4, 2018 4G LTE coverage reporting deadline.<sup>35</sup> T-Mobile has two microwave paths licensed in Glasgow, Montana, but these licenses were not granted by the FCC until February 13, 2018<sup>36</sup> – again, after the January 4, 2018 deadline. More relevant, however, is the fact that, according to photographic evidence, no microwave facilities were installed or placed into operation by the January 4, 2018 deadline.<sup>37</sup> While photographs taken in December 2018 show a microwave dish on the site,<sup>38</sup> photographic

---

<sup>32</sup> See Declaration of Michael Kilgore at ¶ 10

<sup>33</sup> See Declaration of Michael Kilgore at ¶ 13.

<sup>34</sup> See Declaration of Mike Kilgore at ¶ 12.

<sup>35</sup> See Declaration of Remi Sun at ¶ 7.

<sup>36</sup> Call signs [WRAS250](#) and [WRAS266](#), granted February 13, 2018.

<sup>37</sup> See Declaration of Jerry Tilley at ¶¶ 7-8, evidencing the fact that no microwave facilities are installed at the Glasgow site as of February 13, 2018.

<sup>38</sup> See Declaration of Jerry Tilley at ¶ 8 and Attachment B – Glasgow.

evidence shows that T-Mobile was using *satellite* backhaul at the Glasgow site as of February 13, 2018. However, satellite backhaul cannot typically support download speeds of 5 Mbps.<sup>39</sup>

Throughout the challenge window period, T-Mobile also relied solely on satellite backhaul at its Scobey, Montana site.<sup>40</sup> Sagebrush’s affiliate, Nemont Telephone Cooperative, Inc., (“Nemont”), is the only wireline telephone company capable of providing a backhaul circuit to T-Mobile’s Scobey site sufficient to support 5 Mbps download speeds and it has not done so.<sup>41</sup> T-Mobile obtained a microwave license for the Scobey site on September 13, 2018, long after the January 4, 2018 4G LTE coverage reporting deadline, yet it never installed the microwave backhaul facilities as is evidenced by the photographs attached to the Declaration of Jerry Tilley taken on December 19, 2018.<sup>42</sup>

RWA requests that the Commission investigate the timing associated with T-Mobile’s construction and operation of the Scobey cell site. When did the cell site receive power? When were satellite backhaul facilities installed? When was the Radio Access Network (“RAN”) equipment installed and provisioned? It is one thing to construct a cell site and another to place it in operation and yet another to provision it for LTE service that supports 5 Mbps download speeds. Claiming 4G LTE qualifying coverage before it became available violates the challenge process rules and would mean that T-Mobile made material misrepresentations when it certified its coverage data.

The majority of T-Mobile’s satellite backhaul facilities deployed in northeast Montana do not appear to support download speeds of 5 Mbps.<sup>43</sup> For context and as a way of

---

<sup>39</sup> See Declaration of Lynn Merrill at ¶ 7.

<sup>40</sup> See Declaration of Jerry Tilley at ¶ 6.

<sup>41</sup> See Declaration of Jerry Tilley at ¶ 6.

<sup>42</sup> See Declaration of Jerry Tilley at ¶ 6 and Attachment A – Scobey.

<sup>43</sup> See Declaration of Lynn Merrill at ¶ 7 and Attachment A.

explaining T-Mobile's motivation to attempt to quickly build out cell sites in northeastern Montana, RWA reminds the FCC that on December 21, 2016, the Wireless Telecommunications Bureau granted T-Mobile License LLC a conditional waiver of Section 27.14(g)(1) of the Commission's rules, which would otherwise accelerate – by two years, to June 13, 2017 – the end of license term and related construction requirements for three 700 MHz licenses.<sup>44</sup> The Bureau required T-Mobile to file a 40 percent coverage benchmark filing by January 21, 2018, showing that it provided signal coverage and offered service to at least 40 percent of the geographic area of each License area.<sup>45</sup> T-Mobile claims to have done so as is evidenced by its report filed with the Commission on January 11, 2018.<sup>46</sup> In its efforts to meet its buildout requirement expeditiously, T-Mobile relied on satellite backhaul.<sup>47</sup>

It is apparent from Commission records that T-Mobile had been working on parallel tracks to meet its 700 MHz 40 percent buildout deadline by January 21, 2018. In doing so, it primarily used satellite backhaul, but also separately pursued the installation of microwave and/or circuit backhaul for its Montana sites. However, few – if any – of these microwave backhaul facilities or circuits appear to have been installed prior to the January 4, 2018 4G LTE coverage reporting deadline. Yet, it appears as if T-Mobile went ahead and included these sites

---

<sup>44</sup> *Request for Waiver of Section 27.14(g)(1)*, WT Docket No. 16-319, [Letter](#) to Steve B. Sharkey, T-Mobile License LLC, from Roger S. Noel, Chief, Mobility Division, Wireless Telecommunications Bureau, FCC (Dec. 21, 2016).

<sup>45</sup> *Id.* at p. 6.

<sup>46</sup> See File No. [0008059621](#), Call Sign WQJQ805 (Jan. 11, 2018); See also e.g., Exhibit 1, depicting T-Mobile buildout [map](#) for license call sign WQJQ805 in BEA144 at a -118 dBm. RWA notes that the coverage in this report may be overstated. The coverage and number of cell sites depicted on the map do not appear to match up. Coverage is shown on the map with no corresponding cell site to support the coverage. Is this coverage representative of projected coverage? Or did T-Mobile in its haste leave off the cell sites that would support the -118 dbm coverage? While filed in a different proceeding, this January 11, 2018 Report is also suspect and should be investigated as a separate matter.

<sup>47</sup> See Declaration of Jerry Tilley at ¶¶ 6, 9-11 and Attachments A, C, D, and E depicting satellite equipment installed on T-Mobile sites.

as if it had sufficient backhaul capacity to support 4G LTE qualifying coverage. While T-Mobile states that it uses satellite backhaul in a “tiny fraction” of its sites,<sup>48</sup> photographs show that satellite backhaul is (or was recently) used throughout a significant portion of Sagebrush’s service area – at T-Mobile sites near Scobey,<sup>49</sup> Tampico,<sup>50</sup> Frazer,<sup>51</sup> and West Lustre.<sup>52</sup> T-Mobile’s claims that its sites with satellite backhaul “are fully capable of delivering download speeds of 5 Mbps”<sup>53</sup> are not supported by challenge evidence gathered near Scobey and Glasgow, which show that more than 98% of the test points tested by Sagebrush in northeast Montana failed to meet a 5 Mbps speed threshold.<sup>54</sup> Given T-Mobile’s substantial reliance on satellite backhaul, the inability of satellite backhaul to deliver download speeds of 5 Mbps, and the testing results seen in Sagebrush’s service area, it is more than conceivable that T-Mobile submitted projected coverage as of January 4, 2018, believing that it could fill in the gaps with backhaul improvements and buildout of its 600 MHz licenses before the time came to refute any submitted challenges. (The Commission has now extended the time period between January 4, 2018 and when challenged carriers are able to respond to challenges by calling for an

---

<sup>48</sup> *Universal Service Reform – Mobility Fund*, WT Docket No. 10-208, WC Docket No. 10-90, [Ex Parte Letter](#) from Kathleen O’Brien Ham, Senior Vice President, Government Affairs, T-Mobile, to Marlene H. Dortch, Secretary, FCC, at p. 2, n. 4 (Dec. 14, 2018) (“*T-Mobile Ex Parte*”).

<sup>49</sup> See Declaration of Jerry Tilley at Attachment A – Scobey. The photos in this attachment are from December 2018 and do not show microwave facilities installed.

<sup>50</sup> See Declaration of Jerry Tilley at Attachment C – Tampico. This photo was taken after the January 4, 2018 4G LTE coverage submission deadline, sometime between January 15 and February 15, 2018 and does not show microwave facilities installed.

<sup>51</sup> See Declaration of Jerry Tilley at Attachment D – Frazer. This photo was taken after the January 4, 2018 4G LTE coverage submission deadline, sometime between January 15 and February 15, 2018 and does not show microwave facilities installed.

<sup>52</sup> See Declaration of Jerry Tilley at Attachment E – West Lustre. This photo was taken after the January 4, 2018 4G LTE coverage submission deadline, sometime between January 15 and February 15, 2018 and does not show microwave facilities installed.

<sup>53</sup> *T-Mobile Ex Parte* at p. 2, n. 4.

<sup>54</sup> See Declaration of Lynn Merrill at Attachment A.

investigation and further delaying when challenged parties have the opportunity to refute challenges.)

Based on Sagebrush's drive test results, photographic evidence demonstrating the lack of microwave or circuit backhaul capabilities besides satellite backhaul, and the records of the timing of the installation of wireline circuits in northeastern Montana, RWA submits that it is appropriate for the Commission to investigate T-Mobile to determine if T-Mobile based its reported 4G LTE coverage on what it projected it would have in place after January 4, 2018. In conducting its investigation, the FCC should obtain records from T-Mobile related to when it installed radio access network equipment, power, and backhaul facilities at its Glasgow and Scobey sites, as well as the type of facilities installed at its Glasgow, Montana cell site. RWA believes that this site did not support qualifying coverage on or before January 4, 2018 and that, to the extent any qualifying coverage became available, it only became available after the deadline.

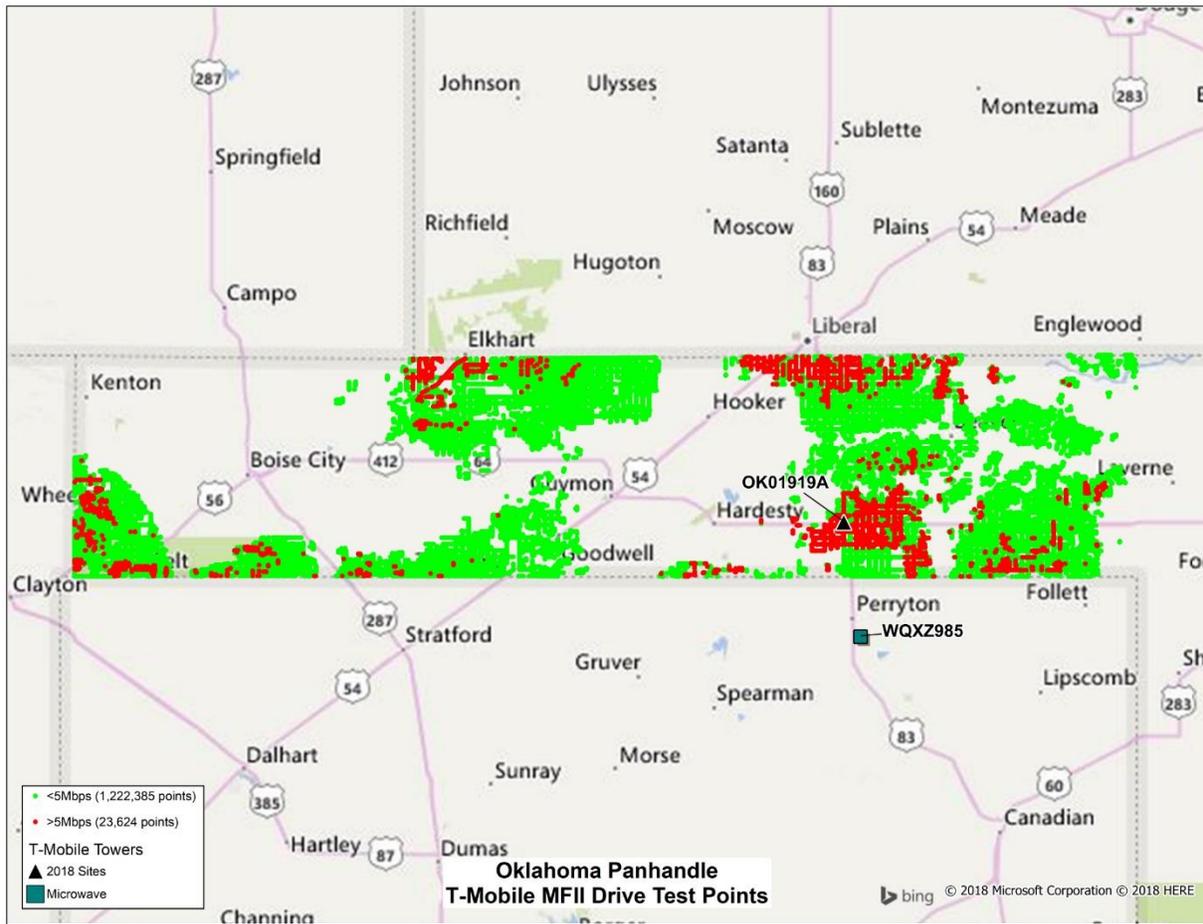
#### **IV. T-MOBILE FILED PROJECTED COVERAGE DATA.**

In addition to demonstrating that T-Mobile overstated coverage where it did not have backhaul facilities capable of supporting its claims, the challenge data demonstrates that T-Mobile has built sites after the January 4, 2018 filing date to cover areas claimed by T-Mobile within the challenge area. Initial drive test results revealed that T-Mobile did not have qualifying coverage in many areas where T-Mobile claimed to have qualifying coverage.<sup>55</sup> Over the course of the testing period (and well past the January 4, 2018 deadline for submitting coverage data) qualifying coverage would suddenly appear weeks or months after the initial drive testing took

---

<sup>55</sup> See Declaration of Jana Wallace at ¶ 6.

place.<sup>56</sup> As discussed below, this strongly suggests that T-Mobile relied on projected coverage when submitting its initial coverage data by the January 4, 2018 deadline. One example of this projected coverage is the OK 01919A (Balko) site pictured below.



In the January 2018 filings, T-Mobile claimed to cover the Balko, OK area.<sup>57</sup> When the MF-II maps were made available for challenge, Panhandle was unable to locate any cell sites in the Balko, OK area.<sup>58</sup> Based on this information, the absence of any cell sites in Balko and the absence of any T-Mobile facilities in this area other than a microwave cell site shown just south of Perryton, TX on the map above, one would expect the claimed coverage in Balko, if correct,

<sup>56</sup> See Declaration of Jana Wallace at ¶ 6.

<sup>57</sup> For a further discussion of the included map, see Declaration of Lynn Merrill at ¶ 8.

<sup>58</sup> See Declaration of Lynn Merrill at ¶ 8.

could only have been provided by backhaul facilities utilizing the microwave cell site shown just south of Perryton, TX on the map above.<sup>59</sup> If this were the case, one would expect the T-Mobile service to become worse the farther north and away from Perryton a test was conducted.<sup>60</sup> However, this mapped data illustrates the opposite.<sup>61</sup> With green representing download speeds below 5 Mbps, the coverage is shown to improve around Balko, OK.<sup>62</sup> The test data collected from challenges show download speeds above the 5 Mbps threshold around the OK 01919A (Balko) site location that was installed in March of 2018, but poor download speeds to the south, closer to the Perryton cell site.<sup>63</sup> Because the test points show that service greatly improves the farther away from the Perryton cell site a test is conducted, the only logical reason for this area to be covered at or above 5 Mbps during the challenge process is that the OK 01919A (Balko) site was turned on to fill in the areas that were not sufficiently covered by the January 4, 2018 deadline yet were claimed as covered.<sup>64</sup> During the period Panhandle drove test this area, coverage appeared after the area had been initially tested, sometimes weeks or months after initial testing occurred.<sup>65</sup>

Why would there be no coverage in the first half of the Challenge Process and then coverage suddenly appear later? Did T-Mobile project its future coverage in hope that it would have the coverage in place by the time the Challenge Process ended? Was the data submitted by January 4, 2018 based on projected network roll out dates? Certainly, the vast gulf between T-Mobile's claimed coverage and the drive test data showing minimal qualifying coverage

---

<sup>59</sup> See Declaration of Lynn Merrill at ¶ 8.

<sup>60</sup> See Declaration of Lynn Merrill at ¶ 8.

<sup>61</sup> See Declaration of Lynn Merrill at ¶ 8.

<sup>62</sup> See Declaration of Lynn Merrill at ¶ 8.

<sup>63</sup> See Declaration of Lynn Merrill at ¶ 8.

<sup>64</sup> See Declaration of Lynn Merrill at ¶ 8.

<sup>65</sup> See Declaration of Jana Wallace at ¶ 6.

necessitates asking these questions.<sup>66</sup> In trying to find answers, challengers with landline telephone company affiliates reviewed records related to the installation of backhaul circuits at the T-Mobile sites. These records demonstrate that, in most cases, the installation of the circuits occurred *after* the January 4, 2018 deadline, meaning that the coverage claimed by T-Mobile could not have been in place prior to the January 4, 2018 deadline. These records are subject to the FCC’s Customer Proprietary Network Information (“CPNI”) rules and are not being provided at this time.

RWA urges the Commission to prohibit carriers that filed overstated coverage, projected coverage, or false coverage from participating in the MF-II reverse auction, and to order those carriers to pay the costs incurred by entities that participated in the Challenge Process. Nationwide carriers should also not be allowed to abuse the FCC challenge process by filing sham coverage maps as a means of interfering with the ability of rural carriers to continue to receive universal service support in rural areas. Failure by the Commission to enforce its coverage map requirements against T-Mobile will undermine the Challenge Process which, in turn, will harm rural carriers, and the customers they serve.<sup>67</sup> RWA also notes for the record that, according to consumers weighing in on Reddit, a vast portion of rural areas lack T-Mobile LTE coverage and these rural consumers are not happy with the level of service being provided by T-

---

<sup>66</sup> See Declaration of Lynn Merrill at Attachments A, B, and C (depicting Sagebrush, Panhandle, and Pine Belt T-Mobile test data).

<sup>67</sup> See House of Representatives Energy & Commerce Committee Hearing, [Oversight of the Federal Communications Commission 2018](#), Opening Statement of Mike Doyle (D-PA) (stating “Chairman [Pai] has claimed that he cares about rural broadband deployment, but the Commission in its zeal not to burden major wireless carriers with reporting where they have wireless service deployed imposed as part of Mobility Fund II a bizarre and onerous challenge process that requires rural providers to hire people to walk through cornfields and backyards trying to prove that communities don’t have wireless service. And if those companies can’t afford to send people up, the Commission will assume these communities are connected. Now tell me, how does that help the 24 million Americans without access to high-speed broadband?”).

Mobile.<sup>68</sup> In addition to RWA members determining through expensive drive testing that qualifying coverage does not exist in its areas, the public is speaking loud and clear across the United States that T-Mobile coverage maps do not support its claims.

## V. CONCLUSION

For the reasons discussed above, RWA urges the Commission to investigate the 4G LTE coverage claimed by T-Mobile to determine if T-Mobile claimed qualifying coverage before it was available. To the extent T-Mobile claimed qualifying coverage before it was available, the Commission should require re-filing of T-Mobile's data as of January 4, 2018 to correct its overstated coverage. In particular, RWA encourages the Commission to obtain and analyze the following information related to the timing of T-Mobile's cell sites built in rural areas in the past three years: 1) date power installed at cell site; 2) date 4G LTE RAN installed at cell site; 3) date backhaul installed at cell sites; 4) type of backhaul installed at cell sites and the capability of the backhaul facilities in place at the time to support 5 Mbps download speeds; 4) date cell sites were provisioned; and 5) date commercial service was launched at each of the cell sites. This information should be provided to the Commission under penalty of perjury and made available for public scrutiny. RWA further requests that the Commission consider taking additional action as appropriate, including, but not limited to, 1) barring T-Mobile from participating in the Mobility Fund Phase II reverse auction; 2) requiring T-Mobile to reimburse challengers for their costs associated with the challenge process; and/or 3) issuing appropriate sanctions for misrepresentation of information submitted by T-Mobile under penalty of perjury.

---

<sup>68</sup> See e.g., Reddit Blog "T-Mobile says it did not overstate 4G LTE coverage to FCC" [https://www.reddit.com/r/tmobile/comments/a7lzx6/tmobile\\_says\\_it\\_did\\_not\\_overstate\\_4g\\_lte\\_coverage/](https://www.reddit.com/r/tmobile/comments/a7lzx6/tmobile_says_it_did_not_overstate_4g_lte_coverage/) (last checked Dec. 26, 2018).

RWA looks forward to its continued work with the Chairman, Commissioners, and Commission staff in this proceeding.

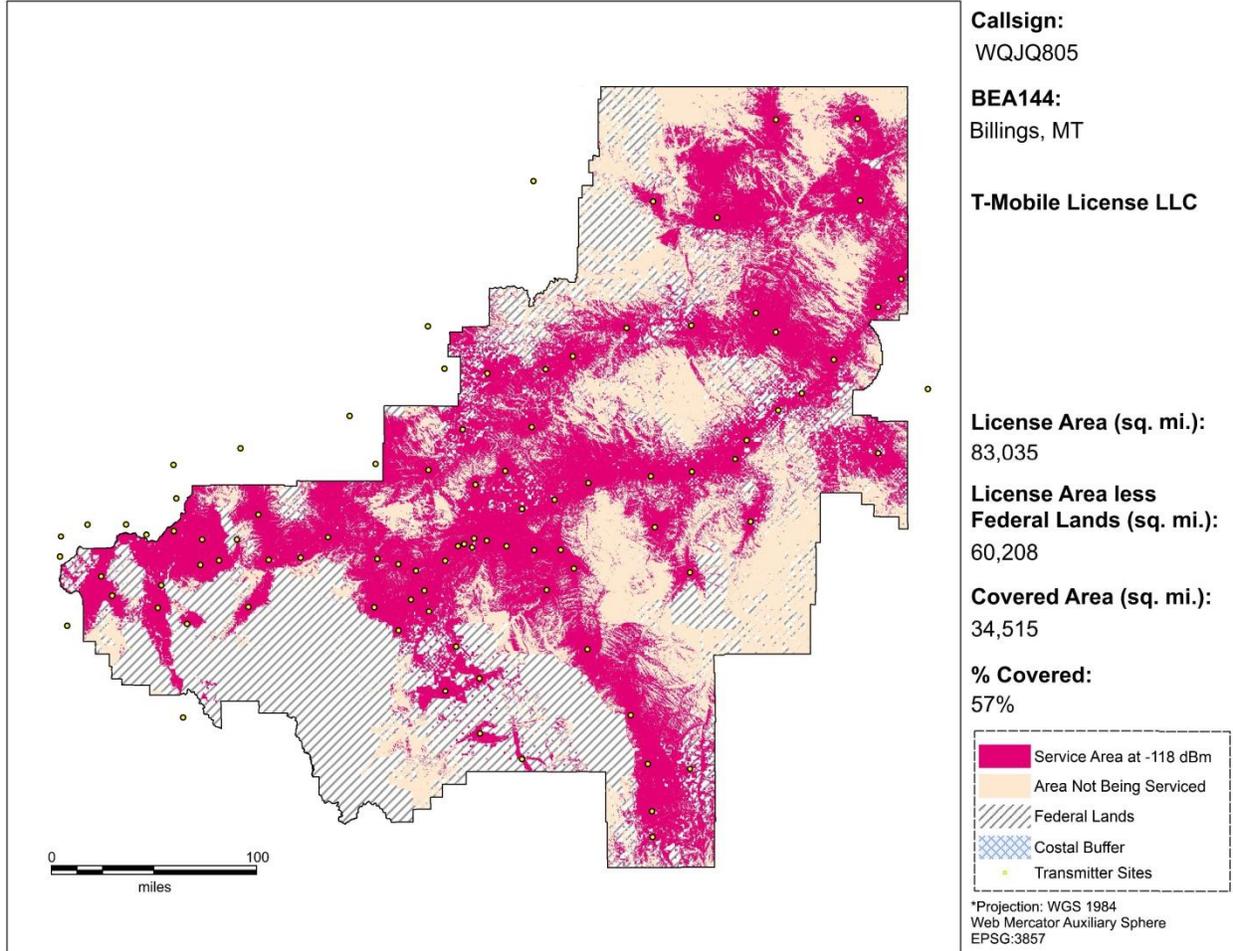
Respectfully submitted,

**RURAL WIRELESS ASSOCIATION, INC.**

By: /s/ Caressa D. Bennet  
Caressa D. Bennet, General Counsel  
5185 MacArthur Blvd., NW, Suite 729  
Washington, DC 20016  
(202) 857-4519  
[legal@ruralwireless.org](mailto:legal@ruralwireless.org)

December 26, 2018

## Exhibit 1 – T-MOBILE WQJQ805 COVERAGE FILING



<b>Call Sign: WQJQ805 -- BEA: 144 - Billings, MT -- T-Mobile License LLC</b>	
<b>License Area (sq. mi):</b>	<b>83,035</b>
<b>License Area less Federal Lands (sq. mi.):</b>	<b>60,208</b>
<b>Covered Area (sq. mi):</b>	<b>34,515</b>
<b>% Covered:</b>	<b>57</b>