April 20, 2018

Via ECFS

Ms. Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

RE: NOTICE OF EX PARTE
WT Docket No. 10-208: Universal Service Reform – Mobility Fund
WC Docket No. 10-90: Connect America Fund

Dear Ms. Dortch,

On April 18, 2018, RWA representatives (listed in Attachment A) met with: (1) Rural Broadband Auctions Task Force, Wireline Competition Bureau, and Wireline Telecommunications Bureau (together, the “Bureaus”) staff (listed in Attachment B); (2) Commissioner Carr and Jamie Susskind, Chief of Staff to Commissioner Carr; (3) Commissioner Clyburn, Neşe Guendelsberger, Wireline Legal Advisor to Commissioner Clyburn, and Joseph Kerins, Law Clerk to Commissioner Clyburn; (4) Amy Bender, Wireline Legal Advisor to Commissioner O’Rielly, and Erin McGrath, Wireless Legal Advisor to Commissioner O’Rielly; and (5) Travis Litman, Chief of Staff and Senior Wireline Legal Advisor to Commissioner Rosenworcel, in separate meetings. RWA representatives discussed concerns regarding overstated unsubsidized coverage and the organization’s pending Application for Review.¹

RWA member Panhandle Telephone Cooperative, Inc. (PTCI) distributed a PowerPoint presentation at the meetings. This presentation, created using PTCI’s coverage data and publicly available data for other carriers, is included as Attachment C.

RWA representatives discussed concerns regarding overstated unsubsidized coverage. RWA utilized the Commission’s Mobility Fund II Map² and coverage data claimed on two nationwide carriers’ websites to illustrate those concerns. The Commission’s map shows that more than one

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² On February 27, 2018, the FCC released a map showing areas across the United States initially deemed eligible to receive support for the deployment of 4G LTE service. On April 10, 2018, the Commission made available a map of areas initially deemed ineligible for Mobility Fund Phase II (MF-II) support due to qualifying, unsubsidized coverage reported by one mobile carrier.
unsubsidized carrier has claimed to provide qualifying service to vast portions of the Oklahoma Panhandle. Coverage maps on both the AT&T\(^3\) and Verizon Wireless\(^4\) websites indicate that both carriers claim to provide 4G and/or 4G LTE service throughout almost the entire Oklahoma Panhandle.

RWA representatives noted that Verizon’s claimed coverage (extrapolated from the Commission’s map and coverage data from the company’s website) is of particular concern. Verizon claims on its website to cover nearly the entire Oklahoma Panhandle with nine towers. Since discussions surrounding the Mobility Fund Phase II process began, PTCI has studied Verizon’s local coverage using publicly available data.

Three years ago, PTCI hired a professional engineering firm to estimate Verizon coverage using specific cell site locations, observational estimates of radio height and antenna placement on towers, 700 MHz spectrum, and service that reflects the customer experience. The Oklahoma Panhandle has a total area of 14,778.47 square kilometers. Using the existing information with a newer modeling tool and the 5 Mbps downlink standard, the engineering firm’s estimate yielded a Verizon coverage area of 6806.49 square kilometers – approximately half of the coverage Verizon claims as served. A map showing this predicted coverage is available on page 6 of Attachment C.

The extent of overstated coverage, not just in the Oklahoma Panhandle but elsewhere, is cause for tremendous concern. This is particularly true given that the Bureaus’ imposition of a square kilometer grid cell with a ¼ kilometer buffer radius makes it nearly (if not actually) impossible to challenge claimed coverage in the 150-day challenge period. An ex parte filed by RWA on March 21, 2018 discusses this issue in detail.\(^5\) RWA reviewed the ex parte in the meetings, and has included the ex parte’s maps with this filing for ease of reference.

Specifically, Page 1 of Attachment D depicts the Oklahoma Panhandle divided into one square kilometer grid cells, utilizing a ¼ kilometer buffer. The green grid cells are those with roads sufficient to meet the 75% coverage requirement for testing. The red areas are those without sufficient roads to meet the 75% threshold because they are not capable of being tested from roads. In the Oklahoma Panhandle, 82.3 percent of the kilometer grid squares with a ¼ kilometer buffer would be unmeasurable using drive tests along road ways.

Page 2 of Attachment D depicts portions of Alabama divided into one square kilometer grid cells, utilizing a ¼ kilometer buffer. 86 percent of the kilometer grid squares would be unmeasurable using drive tests. Reviews of other areas yielded similar results. Page 3 of

\(^3\) AT&T Domestic Wireless Data Coverage Map (last visited April 19, 2018) (claiming 4G and 4G LTE coverage throughout nearly all of the Oklahoma Panhandle).

\(^4\) Verizon Wireless Interactive Map (last visited April 19, 2018) (showing 4G LTE coverage throughout nearly all of the Oklahoma Panhandle).

Attachment D depicts portions of Oklahoma and Kansas, where 80.3 percent of the kilometer grid squares would be unmeasurable using drive tests. Page 4 of Attachment D depicts portions of Montana, Wyoming, and North Dakota divided into one square kilometer grid cells, utilizing a ¼ kilometer buffer. 91.7 percent of the kilometer grid cells would be unmeasurable using drive tests. In the meeting, RWA made clear that these maps represent a “best case scenario” because the maps took into consideration ALL “2010 census public and private roads.” Further review using Google Earth discloses “roads” that are really just dirt paths on private property that are behind locked gates or otherwise inaccessible. As such, even the green squares deemed challengeable via drive tests are overstated.

An investigation into the time and man hours necessary to complete both on- and off-road testing illustrates why the current grid cell scheme is a problem. Page 1 of Attachment E depicts the results of an analysis undertaken by Monte R. Lee and Company’s professional engineers to determine how many man hours it would take to challenge the 15,110 complete or partial square kilometer grid cells in the Oklahoma Panhandle. Page 2 of Attachment E depicts the results of the same analysis done to determine how many man hours it would take to challenge the 11,636 complete or partial square kilometer grid cells in Pine Belt Cellular, Inc.’s service area.

The analyses were completed using a ¼ kilometer buffer around all 2010 census public and private roads. Upon developing the total area that would be part of each test from the roadways, the Commission’s square kilometer grid was overlaid and the actual amount of speed test coverage from the road inside each grid was determined. Square kilometer grid cells determined to have 75 percent or greater speed test coverage from the road were counted and listed in the row entitled “Over 75% based on roads driven.” Square kilometer grid cells with less than 75 percent of speed test coverage from the road will require one, two, three or four off road tests (taken at least 250 meters from any other buffer area) to obtain the minimal 75 percent area coverage. Each square kilometer grid cell was counted according to the number of “off road” test(s) required and the corresponding percentage of total grid cells by test types are provided. The calculation of hours necessary to complete the tests is based on the total road miles inclusive of the backtracking factor (the need to backtrack on roads to get to different test areas) all driven at an average speed of 30 mph. Faster speeds were not used due to the time interval between application tests on phones. A total average time for each off road test of 15 minutes was used for rural Oklahoma and 30 minutes was used for forest areas of Alabama. This time period includes the time necessary to get out of the vehicle, go to the testing site, take the test, and return to the vehicle. The total hour figures were summed from the drive test hours and the actual number of required off road tests performed.

The analysis found that it will take 7,522 hours (or 50 hours per day for each of the 150 days in the challenge period) to test claimed unsubsidized coverage throughout the Oklahoma Panhandle. The analysis found an even higher number – 11,623 hours (or 77 hours per day for each of the 150 days in the challenge period) – to test claimed unsubsidized coverage throughout Pine Belt Cellular, Inc.’s service area. Differences in terrain, road layout, and tree cover mean it would take more time to test fewer grid cells in Alabama.

In sum, it would take six to eight full-time employees working 150 days just to collect the data needed to mount a challenge. The hours required to do the necessary testing is a tremendous
burden on small and rural carriers with small staffs and narrow operating margins. RWA members emphasized that testing times do not include the time that must be spent seeking permission from landowners to test on private property or to assimilate the collected data into the Challenge Portal.

RWA urged Commissioners to grant its Application for Review – noting that it is critical to ensuring the ability of prospective challengers to mount challenges where necessary. The Application for Review asks the Commission to modify its MF-II challenge process procedure to require the use of a uniform grid with cells of one square mile and a one-quarter mile “buffer” radius instead of square kilometer grid cells and a one-quarter kilometer “buffer” radius. RWA’s *March 21 Ex Parte* includes maps showing what percentage of various service territories would be measurable using drive tests using a one square mile grid and a ¼ mile buffer. RWA has included the *ex parte’s* maps with this filing for ease of reference.

As Page 1 of Attachment F shows, utilizing a one square mile grid with a ¼ mile buffer would alleviate the Oklahoma Panhandle’s measurability problem considerably. Whereas 82.3 percent of the kilometer grid squares with a ¼ kilometer buffer would be unmeasurable using drive tests, that figure would be reduced to 43.6 percent utilizing mile grid squares and a ¼ mile buffer. Page 2 shows a similar result in other portions of Oklahoma and Kansas. Whereas 80.3 percent of the kilometer grid squares with a ¼ kilometer buffer would be unmeasurable using drive tests, that figured would be reduced to 46 percent utilizing mile grid squares and a ¼ mile buffer. Similarly, pages 3 and 4 of Attachment F show that utilizing a one square mile grid with a ¼ mile buffer would more than double the number of grid cells that are measurable using drive tests in Pine Belt Cellular, Inc.’s service area and areas of Montana, Wyoming, and North Dakota.

More areas that are measurable using drive tests mean that these companies will have to expend fewer hours to compile the data necessary to mount a challenge. This outcome will make coverage data more reliable and better ensure that MF-II support is targeted to where it is needed. RWA and its members look forward to working with Commissioners and staff to address these issues.
Pursuant to Section 1.1206 of the FCC’s Rules,\textsuperscript{6} this \textit{ex parte} is being filed electronically with the Office of the Secretary.

Respectfully submitted,

\begin{center}
\textit{/s/ Caressa D. Bennet}
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Enclosures

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\textsuperscript{6} 47 C.F.R. § 1.1206.
Attachment A – RWA Representatives

Carri Bennet- RWA
Erin Fitzgerald- RWA
Shawn Hanson- CEO, Panhandle Telephone Cooperative, Inc.
John Nettles- President, Pine Belt Cellular, Inc.
Lynn Merrill- President, Monte R. Lee and Company
Attachment B – Bureau Staff

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