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

In the Matter of	)	
	)	
Connect America Fund	)	WC Docket No. 10-90
	)	

REPORT AND ORDER

Adopted: October 29, 2014 **Released: October 29, 2014**

By the Deputy Chief, Wireline Competition Bureau:

I. INTRODUCTION

1. In this Report and Order (Order), the Wireline Competition Bureau (Bureau) adopts a specific methodology for calculating reasonable comparability benchmarks for fixed broadband services. In the *USF/ICC Transformation Order*, the Commission required that as a condition of receiving high-cost support, eligible telecommunications carriers (ETCs) must offer voice and broadband services in supported areas at rates that are reasonably comparable to rates for similar services in urban areas.[1] The methodology we adopt today establishes reasonable comparability broadband benchmarks that vary, depending on the supported service's download and upload bandwidths and usage allowance. This approach recognizes that ETCs may choose to meet their broadband performance obligation with a service offering that exceeds the minimum requirements in one or more respects. The approach also is sufficiently flexible to account for any changes that the Commission may adopt regarding the required minimum performance characteristics.

2. We note that because we are announcing the methodology late in the calendar year, the results for 2014 are illustrative and to inform parties that are potentially interested in bidding on Connect America funding for rural broadband experiments in the weeks ahead.[2] We also will take into account the benchmarks published below when adjudicating Connect America Phase II challenges. We plan to announce the 2015 reasonable comparability benchmarks for fixed broadband services when we complete our analysis of the data collected in the annual urban rate survey.[3] We also waive on our own motion implementation of the reasonable comparability benchmarks for Alaska carriers for 2015 to allow further time to determine whether an alternative methodology should be adopted for Alaska.

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[1] *Connect America Fund et al.*, WC Docket No. 10-90 et al., Report and Order et al., 26 FCC 17663, 17693, 17695, paras. 81, 86 (2011) (*USF/ICC Transformation Order*), *aff'd In re: FCC 11-161*, 753 F.3d 1015 (10th Cir. 2014). *See also* 47 U.S.C. § 254(b).

[2] *Connect America Fund et al.*, WC Docket No. 10-90 et al., Report and Order and Further Notice of Proposed Rulemaking, 29 FCC Rcd 8769, 8779, para. 25 & n.58 (2014) (stating that winning bidders in categories two and three must offer 10/1 Mbps service at a price no higher than the reasonable comparability benchmarks for 10/1 Mbps fixed broadband and indicating expectation that the Bureau would announce broadband benchmarks for fixed broadband in the coming months).

[3] *Wireline Competition Bureau Announces Timeline for Completion of 2015 Urban Rates Survey*, WC Docket No. 10-90, Public Notice, DA 14-1544 (Wireline Comp. Bur. rel. Oct. 27, 2014).

II. BACKGROUND

3. On November 18, 2011, the Commission released the *USF/ICC Transformation Order*, which comprehensively reformed and modernized the universal service and intercarrier compensation systems.[4] In the *Order*, the Commission directed the Wireline Competition Bureau and Wireless Telecommunications Bureau (together, the Bureaus) to conduct a survey of residential urban rates for fixed voice, fixed broadband, mobile voice, and mobile broadband services.[5] The Commission concluded that rural broadband rates would be deemed "reasonably comparable" to urban rates under section 254(b)(3) if they fell within a reasonable range of urban rates for reasonably comparable broadband service.[6] The Commission also directed the Bureaus to develop a specific methodology for defining that reasonable range.[7]

4. On June 30, 2014, the Bureau issued a public notice proposing a methodology for calculating the benchmark for fixed broadband service, seeking comment on this proposal and announcing the posting of the fixed broadband services data collected in the 2014 urban rate survey.[8] At the same time, the Bureau also released a *Staff Report* which explored several options for establishing a benchmark, including a weighted linear regression-based approach using download and upload bandwidth and usage allowance as the explanatory variables.[9] The Bureau proposed to use a weighted linear regression model to calculate the average urban rate, asked for comment on the analysis in the *Staff Report*, and encouraged parties to examine the data made available.[10]

5. The Bureau received only two comments on the proposed methodology, from NTCA, WTA, Eastern Rural Telecom Association, and the National Exchange Carrier Association[11] (the Rural Associations) and the Alaska Telephone Association (ATA).[12] The Rural Associations agree that "the linear weighted regression analysis method plus two standard deviations" is a superior approach compared with other methods evaluated in the *Staff Report*.[13] However, the Rural Associations urge the Bureau to use a wider range of data from the urban rate survey to develop the regression, specifically, those observations with a range of speeds from 2 to 40 Mbps. Alternatively, they suggest that the Bureau split the sample to develop separate regressions for services with different speed requirements. They state, for example, that a more reasonable subsample to calculate the 4/1 Mbps benchmark would be those

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[4] *USF/ICC Transformation Order*, 26 FCC Rcd at 17667, para. 1.

[5] *Id.* at 17694, para. 85, 17708, para. 114.

[6] Section 254(b)(3) specifies that consumers in rural and high-cost areas should have access to services that "are reasonably comparable to those services provided in urban areas, and that are available at rates that are reasonably comparable to rates charged for similar services in urban areas." 47 U.S.C. § 254(b)(3).

[7] *USF/ICC Transformation Order*, 26 FCC Rcd at 17704, para. 113.

[8] *Wireline Competition Bureau Announces Posting of Broadband Data From Urban Rate Survey and Seeks Comment on Calculation of Reasonable Comparability Benchmark for Broadband Services*, WC Docket No. 10-90, Public Notice, 29 FCC Rcd 7992 (Wireline Comp. Bur 2014) (*Benchmark Public Notice*).

[9] *Id*. at 7997-8010.

[10] *Id*. at 7994-95.

[11] Comments of NTCA – The Rural Broadband Association; WTA – Advocates for Rural Broadband; Eastern Rural Telecom Association; and the National Exchange Carrier Association, Inc., WC Docket No. 10-90 (filed Aug. 20, 2014) (Rural Associations Comments).

[12] Comments of the Alaska Telephone Association on Calculation of Reasonable Comparability Benchmark for Broadband Services, WC Docket No. 10-90, et al. (filed Aug. 19, 2014) (ATA Comments).

[13] Rural Associations Comments at 7.

observations with download speeds from 2 to 8 megabits per second (Mbps).[14] To estimate a benchmark for a 10/1 Mbps service, they propose using a subsample of all observations with download speeds from 8 to 25 Mbps.[15] The Rural Associations claim that, "[s]eparating the data to reflect more accurately differences between a 4/1 Mbps service tier and a 10/1 Mbps service tier would likely produce more accurate benchmarks for each."[16]

6. ATA argues that the methodology to develop the benchmarks fails to recognize the unique challenges of Alaska's geography and infrastructure, in particular the high middle-mile costs associated with non-terrestrial transport such as undersea fiber connections, satellite, or hybrid fiber-microwave systems.[17] ATA contends these benchmarks would be unattainable by many Alaskan carriers and that applying them as a condition of receiving Connect American Funding is unfair.[18]

III. DISCUSSION

7. The Bureau now adopts a methodology that will be used annually to develop reasonable comparability benchmarks for fixed broadband services offered to residential and small business customers, using the data from the annual urban rate survey. The Bureau adopts its proposal to use a weighted linear regression to estimate the mean rate for a specific set of service characteristics and then to add two standard deviations to this mean to determine the benchmark for services meeting those defined service characteristics.[19] Because broadband service has multiple characteristics (i.e., download and upload bandwidth, usage allowance) that may affect its price, a regression is the most straightforward approach to developing an average urban rate that appropriately takes into account those varying service characteristics. We will annually develop an average urban rate through a regression approach, using data collected from the annual survey, and then determine reasonable comparability benchmarks that are two standard deviations above the average.

8. We adopt the Rural Associations' proposal to develop a single regression using a broader sample of observations, ranging in download speeds from 2 to 40 Mbps.[20] Given that these benchmarks will be applicable to winning bidders in the rural broadband experiments, and those ETCs will be offering fixed broadband service to residential and small business locations significantly faster than the current 4/1 Mbps minimum, we conclude that it makes sense to include higher speed observations in the calculation. In addition, we calculate separate standard deviations for service offerings in the vicinity of 4/1 Mbps using observations where the download speed ranged from 2 up to 8 Mbps, and for services that exceed 8 Mbps downstream using observations with download speeds from 8 to 25 Mbps. We did so because we found that the standard deviation of rate differences from the average of services in the 8 to 25 Mbps range was higher than the standard deviation for services in the lower speed tier. We conclude that calculating two different standard deviations for the lower speed service and the higher speed service

[14] *Id*. at 8.

[15] *Id*.

[16] *Id*. at 9.

[17] *Id*. at 2-3.

[18] *Id*. at 3.

[19] The weights used in the analysis are those provided in the data posted on the Commission's website. *See* Federal Communications Commission, Urban Rate Survey Data, http://www.fcc.gov/encyclopedia/urban-rate-survey-data (last visited Oct. 29, 2014).

[20] The Bureau also tested the Rural Associations' proposal to draw two subsamples from the urban rate data, based on download speed, to develop separate benchmarks for different service tiers. This approach produced benchmarks that were internally inconsistent, with the benchmark for 10/1 Mbps service being lower than the benchmark for 4/1 Mbps service.

effectively addresses the Rural Associations' concern that these services are differentiated products. We incorporate this approach into the benchmark equations provided below.

9. In any given year, providers will need to determine the appropriate reasonable comparability benchmark based on the characteristics of the specific service offered to residential and small business customers that they are relying upon to meet their broadband performance obligations. To determine the applicable benchmark for a given service using the 2014 data, where a service is defined by its download, upload, and usage allowance, a provider would use equations developed based on the weighted regression methodology. For 2014, the equations are as follows:

For services with download speeds greater than or equal to 4 Mbps and less than or equal to 8 Mbps, the equation is

Benchmark = 69.5015 + 0.839703*DOWNLOAD + 1.44127*UPLOAD – 1710.68*K

For services with download speeds greater than 8 Mbps but less than or equal to 25 Mbps, the equation is

Benchmark = 75.6095 + 0. 839703*DOWNLOAD + 1. 44127*UPLOAD – 1710.68*K

10. In each equation, the variables *DOWNLOAD and UPLOAD* must be entered in units of Mbps. The variable *K* equals zero (0) if the service has an "Unlimited" monthly usage allowance, and the variable *K* equals (1/*USAGE ALLOWANCE*) if the usage allowance is not unlimited. The variable *USAGE ALLOWANCE* must be entered in the units of GB per month. Calculated benchmarks should be rounded up to the nearest cent. Examples of benchmark calculations for 2014 are provided below.

Upload Speed/ Download Speed	**Usage Allowance**	**Reasonable Comparability Benchmark**
4/1 Mbps	100 GB	$57.20
4/1 Mbps	Unlimited	$74.31
10/1 Mbps	100 GB	$68.35
10/1 Mbps	250 GB	$78.61
10/1 Mbps	Unlimited	$85.45
25/5 Mbps	250 GB	$96.97
25/5 Mbps	Unlimited	$103.81

11. To facilitate these calculations, the Bureau will post an Excel file and online tool in which providers can plug in the relevant variables to determine the benchmark for specific service characteristics at http://www.fcc.gov/encyclopedia/urban-rate-survey-data.

12. *Temporary Waiver of Benchmarks for Alaska*. On our own motion, we waive implementation of the reasonable comparability benchmarks for Alaska carriers for 2015 to allow further time to study this issue and determine whether an alternative methodology should be adopted for Alaska. We note that the Commission has already relaxed the broadband public interest standards for carriers providing fixed broadband that rely upon satellite backhaul and has held that capacity requirements that

generally apply will not apply to this subset of providers.[21] We will consider in a future Public Notice whether and how to tailor our methodology to the unique circumstances of Alaska.

13. *Effect on the Connect America Phase II Challenge Process.* In the *Phase II Service Obligations Order*, the Bureau adopted an interim presumption for rates to use in the Phase II challenge process, pending the publication of these reasonable comparability benchmarks.[22] For situations where the potential competitor does not offer fixed wireline service in urban areas or does not serve an area where the incumbent itself offers broadband, the Bureau adopted interim benchmarks of $37 for voice service and $60 for broadband service to determine whether that competitor was offering reasonably comparable rates.[23] We recognize that challengers may have relied on the $60 interim figure in preparing their challenges, but note that parties replying to those challenges are free to present evidence that takes into account these announced benchmarks. For example, a price cap carrier may have been able to make a prima facie challenge that a potential competitor's price is over $60, but that competitor may now respond that its particular speed/usage combination is in fact reasonably comparable because it meets a benchmark we adopt today. We will consider the totality of the evidence in adjudicating these Phase II challenges.

IV. ORDERING CLAUSE

14. Accordingly, IT IS ORDERED that, pursuant to sections 1, 4(i), 5(c), 201(b), 214, and 254 of the Communications Act of 1934, as amended, and section 706 of the Telecommunications Act of 1996, 47 U.S.C. §§ 151, 154(i), 155(c), 201(b), 214, 254, 1302, sections 0.91 and 0.291 of the Commission's rules, 47 C.F.R. §§ 0.91, 0.291, and the delegations of authority in paragraph 113 of the *USF/ICC Transformation Order*, FCC 11-161, this Report and Order IS ADOPTED, effective thirty (30) days after publication of the text or summary thereof in the *Federal Register*.

FEDERAL COMMUNICATIONS COMMISSION

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[21] *USF/ICC Transformation Order*, 26 FCC Rcd at 17699, para. 101.

[22] *Connect America Fund*, WC Docket No. 10-90, Report and Order, 28 FCC Rcd 15060, 15079, para. 45 (Wireline Comp. Bur. 2013) (*Connect America Fund Phase II Service Obligations Order*).

[23] *Id.*