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

In the Matter of
Connect America Fund
High-Cost Universal Service Support

COMMENTS
of the
NATIONAL TELECOMMUNICATIONS COOPERATIVE ASSOCIATION,
ORGANIZATION FOR THE PROMOTION AND ADVANCEMENT OF SMALL
TELEPHONE COMPANIES and the
WESTERN TELECOMMUNICATIONS ALLIANCE
IN RESPONSE TO WIRELINE COMPETITION BUREAU REQUEST FOR
COMMENT ON MODEL DESIGN AND DATA INPUTS FOR PHASE II
OF THE CONNECT AMERICA FUND

The Rural Associations listed above\(^1\) submit these Comments in response to the Wireline Competition Bureau’s (the “Bureau) request for comment on model design and data inputs for Phase II of the Connect America Fund (CAF).\(^2\) The Rural Associations limit their comments to certain issues specific to RoR carriers, but may elect to file reply comments on any matters raised by commenters in the Notice.

\(^1\) The National Telecommunications Cooperative Association (NTCA) is a national trade association representing more than 580 rural rate-of-return (RoR) regulated telecommunications providers. The Organization for the Promotion and Advancement of Small Telecommunications Companies (OPASTCO) is a national trade association representing approximately 420 small incumbent local exchange carriers (ILECs) serving rural areas of the United States. The Western Telecommunications Alliance (WTA) is a trade association that represents over 250 small rural telecommunications companies operating in the 24 states west of the Mississippi River.

\(^2\) See, Wireline Competition Bureau Request for Comment on Model Design and Data Inputs for Phase II of the Connect America Fund, WC Docket 10-90, 05-337 released June 8, 2012 (Notice).
I. ANY MODEL DESIGNED TO DISTRIBUTE CAF PHASE II SUPPORT SHOULD BE LIMITED TO PRICE CAP CARRIERS.

The Notice seeks comment on forward-looking engineering cost model design, input and assumptions for price cap carriers. In no case should the use of a model designed to distribute CAF Phase II support to price cap carriers be used to target support for RoR carriers. In addition, any model selected should not be used to identify areas within RoR serving areas as extremely high cost (based on the model) and therefore only eligible for remote area fund (RAF) support. Some may argue it is logical to apply a single model to both price cap and RoR areas since the CQBAT model currently before the Commission purports to produce results for both price cap and RoR areas. The extension of this model in such a manner, however, is inappropriate from both a policy and technical perspective, and lacking in evidentiary foundation, as explained in these comments.

A. Rural RoR carriers have substantially different cost and demand characteristics.

Rural RoR carriers have relatively fewer urban and suburban areas (e.g. lower cost areas) than the price cap carriers. In a previous filing, NTCA found that 42 percent of RoR carrier’s lines were in unincorporated areas. This compares to 16 percent for companies such as Windstream, CenturyLink, Fairpoint and Frontier. The proportion of lines in unincorporated areas for the largest carriers (including Qwest at the time of the analysis) was only six percent.

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This translates to fewer lower cost areas available to rural RoR carriers over which costs can be shared.

Moreover, rural RoR carriers lack the economies of scale and scope that larger price cap carriers enjoy. Not only is their buying power limited, but many do not have multiple lines of business (or the associated diversity of customer base) over which to recover costs and generate revenues. In addition, the rural RoR carriers are not homogenous with regard to customer base, geography, demographics, product and service mix, and other factors that could ostensibly make a “one-size-fits-all” model design appropriate.

From a policy perspective, the Commission is utilizing a model approach to estimate support between a cost benchmark and an “extremely high cost benchmark.” In the support module of the CQBAT model put forth by the ABC plan proponents, it is proposed that support be limited to $176 per line per month with an $80 cost benchmark. While these boundaries clearly enable the Commission to “fit” price cap support within a $1.8B CAF budget, there are no policy, legal, or factual basis for these benchmarks. At the very least, such arbitrary and purely budget-driven benchmarks and limits should not be applied to RoR areas as they have neither a factual tether to the costs associated with serving such areas, nor any legal tether to the statutory principle that calls for universal service support to ensure the availability of “reasonably comparable” services at “reasonably comparable” rates in high-cost areas.

**B. Modeling Assumptions for Price Cap Carriers that May Produce Reasonable Results in the Aggregate Create Significant Distortions for RoR Carriers.**

There are a number of reasons why broad-gauge modeling assumptions that may produce a reasonable outcome for price cap carriers overall cannot be simply applied to discretely located

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4 See Notice at ¶ 2.

5 Id. at ¶ 65.
rural RoR carriers. Because individual rural RoR carriers are located in discrete and effectively confined regions of the country, nationally based assumptions and parameters are too general to produce valid estimates. Large public data sources, such as census data, the National Broadband Maps (public) or commercial sources such as TeleAtlas (which is used in the CQBAT model), contain errors. These errors can result in inaccurate service area boundary determinations or assign incorrect broadband status to subscribers, which cannot be statistically buffered or absorbed by smaller RoR carriers in the same manner as a carrier such as AT&T or CenturyLink or Frontier. This is a fundamental fact of averaging. Small rural RoR carriers do not have the ability to average costs or demand across a broad base.

Rural RoR carriers are not only different from the price cap carriers – they are also different from one another. Cost drivers for a certain group of RoR carriers may be completely different for a different group. Population density, distance, terrain and region may be important cost drivers, but the significance will vary by individual company. The more sensitive companies are to variances in cost drivers, and the smaller the base over which to allocate cost or demand, the more care that needs to be taken in specifying inputs and assumptions. Errors in modeling assumptions and inputs compound and will quickly create distortions in results for RoR carriers.

6 The regression analysis that the Wireline Competition Bureau developed to limit the supported costs of rate-of-return carriers considers many of these same variables. The misapplication of variables, whether in a statistical calculations such as QR or a forward-looking engineering cost model such as CQBAT, can create significant dislocations in results. Numerous parties, including the Rural Associations, have made filings with the Commission discussing concerns with respect to the use of variables within the quantile regression, and the record in that proceeding demonstrates the extreme difficulties involved in attempting to develop models that accurately estimate costs faced by RoR carriers in serving widely diverse service areas. Many of the same issues apply to the use of inputs within a cost model such as the one under consideration here, and are likely exacerbated in a model because of the “averaging” concerns described elsewhere herein.
Network design assumptions in a model are of critical importance. Again, a single approach cannot be utilized for the broad cross-section of RoR carriers. Rural RoR carriers have deployed broadband utilizing a variety of network designs and combinations. Attempting to model this using a single approach will produce both inaccurate and unrealistic results. The best indicator of broadband costs in rural RoR areas is the actual cost of the deployed networks. Since costs are so closely linked to customer location, any estimation approach that does not utilize actual customer location is incorrect from the outset.

C. The Network Topology for RoR Carriers Cannot be Pre-determined.

The Notice also seeks comments on network technology and design. RoR carriers have deployed a wide variety of network designs in order to effectively and efficiently serve their customers. No single set of modeling assumptions can properly capture this diversity.

Both a green-field and a brown-field deployment plan have unique problems. While a green-field approach undoubtedly makes practical sense from a strict modeling perspective, it fails to recognize the significant investment in broadband networks that RoR carriers have already made and which require ongoing support.

In the discussion of network technology and design the Bureau also seeks comment on the terminal value of the modeled network. The terminal value calculation has significant implications for the cost-per-loop calculation. If the terminal value selected in any model is less than the economic or book life, then the cost-per-loop is inflated. An increased cost-per-loop coupled with an arbitrarily low “extremely high-cost benchmark” will drive those census blocks to the RAF.

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7 Id. at ¶ 12.
8 Id.
No single network technology or design should be assumed for RoR carriers regardless of whether a modeling approach is contemplated. Actual data, not broad assumptions, are the best indicators of broadband network costs for RoR carriers.

II. THE USE OF A MODEL AND THE CORRESPONDING SUPPORT STRUCTURE IS ONLY APPROPRIATE FOR PRICE CAP CARRIERS, IF AT ALL.

There are a number of reasons why a network model approach is more appropriate – if appropriate at all – for price cap carriers. First, as discussed earlier, price cap carriers operate over large areas, have a broad customer base and offer a wide array of products and services. The fact that they are price cap-regulated is telling in its own right – these carriers are able to extract economies and efficiencies from combined operations that allow them to successfully operate under an incentive-based form of price regulation. The use of a combined cost and support model – even if only relative in its estimate of broadband network costs – produces sufficient predictability to allow a price cap company to choose to offer new broadband services in rural areas of a given state in exchange for CAF II modeled support for a period of five years. In the alternative, a price cap carrier can forego CAF II support and decrease its requirement to provide broadband in more rural areas. Price cap carriers can effectively exit markets through the auction process and eliminate carrier of last resort obligations, leaving them free to focus on their relatively (or significantly) larger, more profitable markets with little concern for what has been left behind in their outlying areas.

By contrast, RoR carriers serving the most remote and rural areas of the country have no such options. They serve almost exclusively rural markets, and for the most part cannot ignore portions of those small markets in the hope of capturing a better return from “the big city.” They also have ongoing obligations extending beyond the 5-year period contemplated by CAF Phase
II. The incentives that attend small RoR carriers cannot be rooted in either pricing flexibility or the freedom to enter and exit the market at will.

Costs of RoR companies cannot be “shared” over a broad base, so the questions raised in the Notice\(^9\) regarding the method for the allocation of shared network costs among end users or census blocks affect the costs of serving specific areas. The costs of the entire network must be modeled as contemplated by the Bureau. It is critical to distinguish the cost modeling exercise from the support model. An incorrect approach to assigning shared costs to eligible and ineligible areas will result in an over- or under-assignment of costs to an eligible area and distort the corresponding support amount. This highlights the arbitrary impact of the cost and “extremely high-cost” benchmarks in the CQBAT currently before the Bureau.

A census block basis for estimating network costs is far too granular for RoR carriers. Networks are built on a serving areas basis and actual costs are realistically captured at an operating company or study area level. Attempting to model the costs of a RoR carrier at a sub-company level is problematic and will fail to reflect the costs of deploying and operating a broadband network – an objective to which most RoR carriers remain committed.

III. CONCLUSION.

The use of a forward-looking engineering network cost model is not warranted for rural RoR carriers, whether used to determine support or to identify census blocks eligible only for support from the RAF. The lack of scale, overly-broad network assumptions, and reliance on untested or unreliable data sources virtually guarantees inaccurate estimates for RoR carriers. While a model such as CQBAT attempts to model RoR areas, it has not been fully vetted even in price cap areas for which it has truly been designed. Before a model approach could even be

\(^9\) Id. at ¶ 41.
contemplated for RoR carriers, a thorough validation and testing of the model design as well as inputs and assumptions would need to be performed. Given the level of effort (and level of challenges) already associated with the regression analysis-based caps on support that were adopted for RoR carriers, moving to a network model would be a massive undertaking.

The policy and operating characteristics underlying the differences between price cap carriers and RoR carriers are real. As noted herein, price cap carriers are able to extract economies and efficiencies from combined operations over larger footprints that include populated areas. These factors allow them to successfully operate under an incentive-based form of price regulation, and moreover, they can effectively exit markets through the auction process and eliminate carrier of last resort obligations, leaving them free to focus on their relatively (or significantly) larger, more profitable markets with little concern for what has been left behind in their outlying areas. The approach of “fitting” a model to match a CAF Phase II support budget cannot be applied to RoR carriers. Even if the cost estimates were more accurate, the arbitrary cost benchmark and “extremely high-cost benchmark” preclude the ability of a model to allocate appropriate support to RoR carriers.
Respectfully submitted,

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