

**Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In the Matter of)	
)	WC Docket No. 10-90
Connect America Fund)	
)	WT Docket No. 10-208
Universal Service Reform – Mobility Fund)	
)	WC Docket No. 14-58
ETC Annual Reports and Certifications)	
)	WC Docket No. 07-135
Establishing Just and Reasonable Rates for Local Exchange Carriers)	
)	CC Docket No. 01-92
Developing an Unified Intercarrier Compensation Regime)	

REPLY COMMENTS OF PARRISH, BLESSING & ASSOCIATES, INC.

Parrish, Blessing and Associates, Inc. (“PBA”) submits these Reply Comments in response to the Federal Communications Commission’s (“Commission”) Further Notice of Proposed Rulemaking (“FNPRM”) seeking comment on its Federal Universal Service Fund Reform (“FUSF”) proposals.¹ These comments address certain issues raised by other parties pertaining to the determination of Connect America Fund Phase II (CAF Phase II) support for rate-of-return carriers, as well as other important issues raised by the Commission’s proposed reform.

¹ See *Connect America Fund et al.*, Report and Order, Declaratory Ruling, Order, Memorandum Opinion and Order, Seventh Order on Reconsideration, and Further Notice of Proposed Rulemaking, WC Docket No. 10-90 et al., FCC 14-54 (rel. June 10, 2014) (“FNPRM”).

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I. Introduction and Summary.

PBA has been assisting mid-size and small incumbent local exchange carrier (ILEC) clients for over twenty years. We have been deeply involved in the CAF Phase II process since its beginning working with our insular price cap clients in developing and submitting broadband cost models,² evaluating the CAM Model and assisting in advocacy before the Commission that led to the adoption of the frozen support option for insular carriers. Most recently, PBA developed proposals for “tailored service obligations” on behalf of our insular clients that “reflect [its] level of support and would be consistent with the Commission’s goal of ensuring universal availability of modern networks capable of providing voice and broadband service to homes, businesses, and community anchor institutions.”³

Our experience and a review of the initial comments filed on August 8th by rural local exchange carriers (RLECs) and their associations make clear that many of the challenges faced by the insular carriers are shared by the RLECs.⁴ Just as these challenges required the Commission to treat the insular price cap carriers differently from the larger mainland-based price cap carriers, so too must special consideration be given to the unique characteristics of RLECs if the Commission’s goals of ubiquitous broadband availability in rural areas at service levels and rates reasonably comparable to those in urban areas are to be met.⁵

² PBA developed the ACS Model, the Puerto Rico Broadband Cost Model and the Virgin Islands Broadband Cost Model that were submitted in this proceeding by Alaska Communications Systems, Puerto Rico Telephone Company and the Virgin Islands Telephone Company, respectively.

³ FNPRM at ¶ 211.

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⁵ *Id.* at ¶ 258.

Commissioner Rosenworcel has stated that the CAF Phase II effort has become overly complicated.⁶ We agree and submit that many industry stakeholders may have become so wrapped up in the process that they are in danger of losing sight of the original goals of FUSF reform. The Commission's stated goals are to increase the level of broadband availability in rural areas and to ensure that service levels and rates are reasonably comparable to those available in urban areas.⁷ No party disputes that achieving these goals will require additional investment on the part of the RLECs. The amount of money required for an individual company is a function of the demographics, geology and topology of the service area as well as the current build-out and condition of the network. With unlimited fund dollars to draw upon, the individual company differences would not impact the ability to meet these goals. However, a fixed budget dictates that the Commission must balance the need to limit the fund size with the fact that many of the remaining locations without broadband availability are some of the most remote and costly.⁸

The establishment of a fixed budget at the existing level of aggregate support represents a fundamental shift from the actual cost-based mechanisms that determined support levels in the past. The Commission's proposals essentially will require that RLECs, in aggregate, expend additional resources to achieve the newly-defined universal service goals while receiving the same aggregate level of support. In effect, the decision to fix the aggregate available funding at the current level means that universal service reform for the rural LECs boils down to a redistribution of the funding between individual carriers. FUSF reform is left to focus on the

⁶ Statement of Commissioner Jessica Rosenworcel, attached to FNPRM.

⁷ FNPRM at ¶ 211.

⁸ USF/ICC Transformation Order, 26 FCC Rcd at 17672, para. 17. Rural areas are far more likely to lack broadband availability than urban areas. See FNPRN at 140.

issues of: 1) identification of areas eligible for funding; 2) determination of how the funding will be redistributed amongst these eligible areas; and 3) establishment of the public interest obligations that will be attached to the receipt of funding. In considering these issues PBA urges the Commission to remain focused on the overall objective of increasing broadband availability in all rural areas. The challenges faced by the RLECs, like those of the insular carriers, are not the same as those faced by the mainland price cap carriers and one-size-fits-all solutions or estimates from a nationwide cost model are not likely to lead to the calculation of “specific, predictable and sufficient”⁹ support for these rural companies.

Probability theory’s Law of Large Numbers implies that a nationwide cost model will more accurately estimate costs at the state level than at a small rural company level. Further, the redistribution of fixed funding, whether through the application of a cost model or some other method, will lead to the creation of sets of “winners” and “losers”, i.e. those RLECs that see their funding increase and those that see their funding decrease. Even those companies whose funding remains close to the current level may find themselves to be “losers” if the public interest obligations adopted as a condition of the acceptance of FUSF support would result in additional costs in excess of the support provided. Whether the same level of support or a reduced level of support will allow a RLEC to build out its network to increase broadband availability cannot be determined by a national cost model that does not consider the current state of the RLEC’s network or its financial condition. Support to individual RLECs should not be reduced or even maintained at current levels without first evaluating these conditions.

PBA believes that any long term solution that includes the use of a nationwide model in the reform of FUSF should limit the use of the model to the determination of support for rate-of-

⁹ 47 U.S.C. 254(b)(5).

return carriers at the state level and should require that state commissions become more actively involved in the distribution of support to the RLECs under their jurisdiction. State commissions have a better understanding of the unique challenges faced by the RLECs in their states. This understanding and the state commission's ability to coordinate the distribution of federal funding with the state's own universal service efforts would allow for a more efficient allocation of fixed aggregate support to maximize the expansion of broadband availability at reasonably comparable rates.

The Commission's proposal "to establish a Connect American Fund based on a forward-looking model"¹⁰ for rate-of-return carriers illustrates its desire to move universal service mechanisms and interstate rate regulation to market-based regimes that are similar to those under which price cap carriers operate. Model-driven support and alternative regulation regimes, when viewed in a vacuum, can have positive attributes that may be favorable to RLECs and their customers, but only if they are implemented with the unique circumstances of the carriers in mind. The ability to evaluate the impact of such reform mechanisms is limited, however, particularly when they are implemented as part of a reform package that includes a fixed budget equal to the pre-broadband level, a forward-looking model that is not finalized, and unknown public interest obligations. Since any potential benefits from the reform mechanisms of model-driven support and alternative regulation may be dampened by the effects of other components of the reform package, the current uncertainty surrounding how RLEC support will be determined will impact the very behavior the Commission's reforms are attempting to induce.¹¹

¹⁰ FNPRM at ¶ 258.

¹¹ As Commissioner Rosenworcel noted in her statement attached to the FNPRM the uncertainty created by the changes made in the method used to determine RLEC support has hindered the RLECs "ability to invest in their network infrastructure."

II. The Commission's Proposals Represent a Fundamental Shift in Federal Universal Service Policy.

The Commission has publically stated that the principal goals of its universal service reform efforts are to increase high quality broadband at reasonably comparable prices.¹² These goals are certainly laudable and consistent with the statutory mandate to the Commission. Broadband services are increasingly becoming the preferred method by which consumers interact in society and they are evolving to the point where consumers use higher speed/capacity connections to access many different services, including telecommunications, information, and entertainment services. Increasing access to broadband services must be a cornerstone of federal and state universal service policies, but at the same time it must be recognized that such universal service policies do not come without a cost. If a significant level of the costs of universal service reform are imposed on essential telecommunications and broadband services there is a real risk that such services will become unaffordable for many consumers.¹³ Thus, a managed budget becomes a necessary method by which the Commission can control the cost of its universal service program and keep the Federal Universal Service Charge at a reasonable level.

Federal universal service support has traditionally been based on a determination of a carrier's costs to serve an entire geographic area. Carriers were required to provide ubiquitous services throughout their respective service areas and, in exchange, the Commission ensured that carriers were able to recoup the common line costs assigned to the interstate jurisdiction and were provided high cost loop support to assist in maintaining affordable local rates. The responsibility to provide carriers the opportunity to recover the remaining costs assigned to the

¹² FNPRM at ¶¶ 267 and 269.

¹³ Comments of the Rural Associations at page 13.

intrastate jurisdiction fell to the respective state commissions. With respect to rate-of-return companies, the basic universal service premise has remained essentially unchanged. In exchange for ongoing universal service support designed to recoup its costs, a rate-of-return carrier provided service to all customers at affordable rates regardless of the underlying costs. From an economic standpoint, universal service support was essentially an additional revenue stream designed to recover costs that could not be recovered from customers.

The Commission's proposed changes to its universal service programs represent a fundamental shift in the traditional paradigm. Rather than an actual cost basis for determining support, the Commission seeks to adopt what could be aptly described as a "goal-based" mechanism. The Commission will define a goal, or obligation, currently proposed to be the rural carrier's provision of reasonably comparable broadband services to a set of locations within their service area at rates comparable to those in urban areas. Upon acceptance of that obligation, the carrier receives an allocation of a lump sum of support for a fixed period of time.¹⁴ Under the Commission's long term proposal support will be based on an estimate of the cost to provide such services as determined by a national cost model. We will not discuss the potential pitfalls of designing hypothetical networks in a laboratory here, but suffice it to say, there is a very real possibility that a carrier's actual costs will vary significantly from the cost estimates generated by a model eventually adopted by the Commission. Under the Commission's proposal the model-based costs would be compared to an expected average revenue per subscriber and the resulting difference represents the amount of available support per supported location. In exchange for accepting the responsibility to provide broadband service to all supported locations

¹⁴ FNPRM at ¶ 258.

within a service territory, companies will receive the calculated universal service support for a currently undefined fixed period of time, perhaps five or ten years.

III. Establishment of a Fixed Budget Will Be Detrimental to the Commission's Goals.

The Commission has made clear that the \$2 billion federal USF budget for rate-of-return carriers is not going to be increased. The Commission states that it is “essential to remain within the budgetary frameworks established by a unanimous Commission.”¹⁵ The Commission reiterates that whatever regime they eventually adopt must work “within the existing budget of \$2 billion.”¹⁶ In three of the Commissioners’ statements there is language that lauds the fact that the Commission has established a budget for USF and Commissioner O’Rielly suggests that he will look to reducing the budget. As a result, there should be no expectation that the \$2 billion budgeted for CAF Phase II rate-of-return carrier support, including ARC recovery, will be increased.

A. The Fixed Budget for RLEC FUSF Will Result in the Creation of “Winners” and “Losers”.

By establishing a fixed budget limit equal to the current support provided to rate-of-return carriers the Commission is effectively redirecting USF reform efforts away from an attempt to determine the appropriate level of total support and how best to distribute it to one of simply redistributing existing support. As a result, the Commission must decide whether a forward-looking cost model or tweaks to the existing embedded cost methodology would lead to a more efficient distribution of fixed federal support.

¹⁵ FNPRM at ¶ 136.

¹⁶ FNPRM at ¶ 268.

Rate-of-return carriers are not alone in dealing with a fixed federal USF budget. While price cap carriers also face a fixed budget amount of \$1.8 billion¹⁷, there are, however, two glaring differences. First the fixed budget of \$1.8 million provided to the price cap carriers represents a 67% increase over the current frozen federal support provided to these carriers. As a result of the large increase in the budget most of the price cap carriers will see significant increases over the current support amounts. Alaska Communications Systems, Puerto Rico Telephone Company and Virgin Islands Telephone Company, all serving insular areas, are notable exceptions.¹⁸ ACS' support under the model is just slightly greater than the current support received.¹⁹ Model driven support for PRTC is just under 19% of the current amount.²⁰ For VITELCO model driven support is 21% of the current amount.²¹ This was a very contentious topic during the model phase of the proceeding that resulted in the insular areas being granted the option to continue to receive frozen support. The CAM 4.1.1 that was eventually adopted by the Wireline Competition Bureau (Bureau) was the result of over two years of intense review and analysis by the Bureau and other stakeholders, yet there still remained questions as to whether the model was sufficiently able to capture the unique characteristics of the insular carriers. In view of the widely diverse and unique operating and cost characteristics of the over 1,000 rate-of-return carriers to be addressed by a nationwide cost

¹⁷ FNPRM at ¶ 199.

¹⁸ The comparisons of current support and model driven support for price cap carriers where made from 2013 First Quarter thru Fourth Quarter Appendices located at <http://www.usac.org/about/tools/fcc/filings/default.aspx>, HC01- High Cost Support Project by State by Study Area – 1Q2013 thru 4Q2013 and *WCB Releases Connect America Cost Model Illustrative Results Using Higher Speed Benchmark*, Public Notice, WC Docket No. 10-90, DA 14-833, released June 17, 2014. (Illustrative Results).

¹⁹ Illustrative Results.

²⁰ *Id.*

²¹ *Id.*

model, as proposed by the Commission, it is quite likely that it will be an even greater challenge to develop a representative cost model for these carriers than it was for the insular price cap carriers.

The second difference between the fixed budgets faced by rate-of-return and price cap carriers is that the percentage of the carrier's total revenues derived from federal USF is much greater for rate-of-return carriers than it is for price cap carriers. For example, the CAM 4.1.1 model estimates support for AT&T and Verizon, assuming 10MBPS/768KBPS service, at \$521.97 million and \$145.54 million respectively.²² Based on the revenue reported in the companies' 2013 annual reports, model driven support is less than ½ of 1% of each company's total revenue. There has been much speculation that AT&T, Verizon and potentially other price cap carriers will elect not to accept model driven support in order to avoid the state level commitment requiring that broadband be made available to 100% of the model-funded locations over the five-year period of CAF Phase II. When federal support is less than ½ of 1% of total revenue the decision of whether or not to reject federal support for a state is much easier than when support represents a much larger portion of total revenue, which is certainly the case for many, if not most, rural rate-of-return carriers. Further, the larger the percentage of total revenue represented by federal support, the more important the accuracy of any support distribution methodology becomes, be it based on an accounting system or on a forward-looking cost model.

²² *Id.*

B. Under a Fixed Budget FUSF Reform Essentially Is a Support Reallocation Methodology.

The fact that the budget for rate-of-return carrier support is fixed at an amount equal to the current level means that any change to the methodology that determines support for individual carriers, be it model-driven or some other process, is nothing more than a reallocation mechanism of the current fund amount. The Commission already has concluded that the current \$2 billion is the proper amount of total support for rate-of-return carriers and, asks for comments on what changes should be made to the CAM model to make it appropriate for use in determining how to redistribute that same amount in federal support.²³ Because of the fixed budget, changes to the cost model, while possibly improving the accuracy of the model's estimates, may not change a carrier's level of support in the expected manner. For example, assume that the Commission determines that the material and labor prices for underground fiber cable currently in CAM 4.1.1 are too low based on the experience of rate-of-return carriers. If the Bureau decides to increase the material and labor input prices in the model by some percentage, the cost estimates will change for all rate-of-return carriers. The change will increase the average cost per location in all census blocks but it will not necessarily increase an individual carrier's support. This is because the Commission will adjust the mechanism's parameters in order to keep total support at or below the budgeted amount. The Commission will estimate a "supported zone", defined by a lower and an upper benchmark, and locations will only be supported under CAF Phase II if the average cost per location in a census block falls within the benchmarks that define the supported zone.²⁴ Consequently, even though a carrier's costs

²³ FNPRM at ¶ 199.

²⁴ The upper benchmark once referred to as the "Alternative Technology Cutoff" is now called the "extremely high cost threshold." Any census block above this threshold would not be funded through CAF Phase II but rather through the Remote Area Fund.

might be increased by a change to the model, manipulation of the supported zone benchmarks to meet budget requirements might render results that result in the same or lower support for that carrier.

As witnessed in the cost model phase of the CAF Phase II proceeding for price cap carriers, any change to the model that impacted costs resulted in adjustments to the benchmarks to keep the overall funding within the established budget. As the discussion in the FNPRM indicates, the Commission is heading in this direction for rate-of-return carriers as well.²⁵ The mechanism will hold total support at the budgeted level by adjusting the benchmarks while total support will be redistributed among the individual carriers. Some carriers will see support increase as locations fall into the adjusted supported zone and others will see support drop as the cost for some locations fall below the lower benchmark or above the upper benchmark. In addition, such manipulation of the support zone benchmarks also can impact the Extremely High Cost Threshold in a manner that could result in an increased number of a carrier's census blocks being assigned to the RAF, a result that potentially could decrease CAF Phase II model-based support for that carrier.

All rate-of-return carriers would likely agree that total federal support should increase as a result of the CAF Phase II obligations. The fixed budget, however, changes the question from determining the appropriate fund budget to redistributing the fixed budget amount. The RLEC industry is not going to come to a consensus on the proper way to redistribute the existing \$2 billion in funding when every dollar of increased funding for one carrier leads to a dollar reduction in funding to other carriers. The Commission has asked how the model should be

²⁵ FNPRM ¶ 271. "If the Commission were to provide support for stand-alone broadband offered by rate-of-return carriers, should it provide such support only for costs that exceed the \$52.50 funding benchmark established for price cap territories."

changed in order to further the Commission’s goals of increased broadband availability at reasonably comparable rates. From any individual company’s perspective, the appropriate changes would be those that result in its model-driven support being no less than the current level. Every rate-of-return carrier will reach the same conclusion – the appropriate changes to the model are those that result in model-driven support that is greater than or equal to what they currently receive. It is not hard to see that, given a fixed budget, the only solution that could satisfy all rate-of-return carriers would be a set of changes to the model that leaves every carrier with model-driven support equal to current support.²⁶ If the only way to reach industry consensus on the appropriate distribution of the fixed level of aggregate support is to not make any changes to the existing distribution, it makes one wonder why we should go through this process at all.

C. Any Significant Reallocation of Support to Individual Carriers Under a New Support Distribution Methodology Is Cause for Concern.

A significant reallocation of the fixed CAF Phase II funding budget among individual rate-of-return carriers may undermine the goal to utilize a finite amount of funding in the most efficient and effective manner possible. As discussed previously, it is intuitive that a significant reduction in an individual carrier’s support will be detrimental to that carrier’s ability to provide affordable voice and broadband services, but the Commission also should be concerned about individual companies realizing unexpected windfalls through funds reallocations that will be the *de facto* results of the proposed reform. The Commission should consider the adoption of policies under which any windfall support allocations to individual carriers are examined based on a set of established criteria to ensure that such a windfall constitutes an effective use of the allocated

²⁶ Comments of the Rural Associations at page 12.

funding. Funding deemed to be in excess of an efficient amount would be recovered and redistributed to other areas, specifically those areas where support has been significantly reduced under the reallocation process.

IV. Several Issues Must Be Considered Before Any Reform Is Adopted.

The changes proposed by the Commission, or the changes accompanying any reform, will not occur in a vacuum. In order to achieve the stated goals of increased broadband availability at reasonably comparable rates, PBA believes that several issues, as discussed below, must be considered in the Commission's deliberations regarding universal service reform.

A. Changes in FUSF Policy Should Not Result in a Reduction of Affordable Services Available in Rural Areas.

As a general matter, PBA agrees with the Nebraska Rural Independent Companies that the Commission should not adopt any policy that will lead to a reduction in the availability of existing services at affordable rates.²⁷ It would be contrary to the public interest if an emphasis on expanding broadband availability results in a reduction of the current level of services available within high cost rural areas due to a reduction in support funding. The protection of service availability should include traditional telephone services as well as existing broadband services. Broadband is now the preferred technology for the delivery of telecommunications services, including voice service. However, despite the rapid expansion and increased use of broadband services, many Americans continue to rely on traditional means of accessing telecommunication services, such as the switched local service provided by rate-of-return companies, even as these companies transition their networks from TDM platforms to IP-based

²⁷ Comments of Nebraska Rural Independent Companies (NRIC) at page 3.

networks.²⁸ Many of these rural subscribers relying on traditional networks are among the most vulnerable members of society, including the elderly and low income households. Federal Universal Service Fund support has been and will continue to be critical to the ability of rural rate-of-return carriers to serve this segment of the population. Further, support must also be maintained in those high cost areas where broadband services already have been deployed by rate-of-return carriers with support from existing high cost funding mechanisms. As it endeavors to accelerate the increase in broadband deployment, it is incumbent upon the Commission to ensure, as it has acknowledged, that the necessary support flows upon which these persons depend for affordable existing broadband and traditional voice service are not interrupted.²⁹ The Commission must ensure that the transition to CAF Phase II does not hinder the ability of rate-of-return carriers to continue to provide the services that past levels of support have made possible.

B. Support for Traditional Networks Is Critical to the Continuing Operation of E911.

Support must be maintained for the continued operation of traditional networks for the purpose of ensuring that E911 networks remain available. Traditional switched telephone services in rural areas continue to be the primary vehicle by which persons access the 911 networks and contact emergency services.³⁰ For many years, the switched telecommunications network has been the connection between those in need and emergency services resources. A primary benefit of this network is its ability to identify and pass on the accurate location of the

²⁸ Technology Transitions et al., GN Docket No. 13-5 et al., Order et al., 29 FCC Rcd 1433, 1463-79, ¶ 1(2014).

²⁹ FNPRM at ¶ 66.

³⁰ FCC Report to Congress and Recommendations, February 22, 2013.

person(s) in need to first responders. This capability currently does not generally exist for broadband services. In recognition of this issue, the Commission has, through its Next-Generation 911 efforts, begun to explore the expansion of emergency service requirements to broadband services. The Commission has made some progress through these efforts, such as the deployment of text-to-911 services. However, under no reasonable definition can broadband yet be considered a replacement for traditional telecommunications services relative to emergency services communications.³¹

C. The Remote Area Fund Needs to be Completely Defined.

The Commission should finalize the details of the Remote Area Fund (RAF). Under the Commission's current proposal, price cap areas where the model-based cost exceeds an Extremely High Cost Benchmark will not be eligible to receive CAF Phase II support. The Commission stated that no decisions have been made about how the RAF would be implemented in the areas served by RLECs.³² Because the RAF funding mechanism and the associated budget have not been finalized, there is no way to know the potential level of funding that RAF locations would receive. To fully evaluate the impact of universal service reform, the Commission and other stakeholders must have complete information on how the entire process, including the RAF, will function. The uncertainty surrounding the RAF mechanism and support for extremely high cost locations will contribute to the reluctance on the part of RLECs to commit to the network infrastructure investment necessary to expand broadband in their territories. The Commission should finalize the RAF mechanism, as well as the other RLEC

³¹ FCC 05-116, para 27 and 57, regarding provision of 911 service with power outages and automatic provision of customer location.

³² FNPRM at ¶ 71.

support determinants, locking in a specific methodology. Only in this way can the full ramifications of reform, and any potential reallocation of support, be evaluated.

V. The Commission Should Reduce the Uncertainty Surrounding Future Support Flows and Define Its Long Term Vision as Soon as Possible.

While no one has a crystal ball, the Commission should promote a complete dialog regarding the incentives that its universal service policy will create over the long term. In our experience, companies and consumers do not necessarily respond to good intentions or lofty goals, but rather they more often respond to economic forces and personal preferences. The universal service reforms proposed by the Commission would result in significant changes in the economic variables faced by the affected companies, and one of the most significant of these changes is the lack of certainty with respect to future support flows.³³ Carriers are currently operating under both short term and long term uncertainties. In the short term, rate-of-return carriers do not know the level of support to expect over the next five to ten years as the Commission finalizes its reforms. In the long term, carriers are unsure of how much support to expect when CAF Phase II expires in five or ten years. This uncertainty has a significant impact on a carrier's incentives to make the investment that is central to the Commission's goal of expanding broadband availability and will give pause to companies when faced with the decision to accept or reject CAF Phase II funding.

Proposed CAF Phase II terms of five or ten years means that the funding horizon will differ significantly from the expected life cycles of the facilities and equipment deployed to provide broadband services. Consequently, the adequacy of support and the timeframe over which it will be received is central to a company's evaluation of whether to accept support and the obligations

³³ 47 U.S.C. 254(b)(5).

that come with it. Differences in the funding and investment horizons will create additional uncertainty for a company. This additional uncertainty will increase the firm's risk associated with the potential investment and therefore decrease the likelihood that the firm is willing to make the initial investment and commit to funding requirements for the period beyond which funding will be available. By decreasing the uncertainty faced by a company, and therefore risk, the Commission can increase the amount the firm is willing to invest of its own capital.

In line with establishing policies that align a carrier's incentives with the goals of expanding broadband, the Commission should provide additional guidance regarding its longer term vision and goals relative to its universal service policies, i.e. what is likely to happen after the expiration of the initial CAF Phase II funding period.³⁴ The building of broadband networks and the provisioning of high speed services throughout the country is not simply a five- or ten-year process.³⁵ The uncertainty regarding the future intentions of the Commission after the initial CAF Phase II term expires will affect the financial decisions that companies need to make when considering whether to commit to investments that will need to be recovered over twenty-five years.

VI. State Regulators Should Have an Expanded Role in the Implementation of Federal Universal Service Policy to Ensure that State and Federal Efforts Are Complementary and Administered in a Coordinated Fashion.

Effective coordination between the federal and state universal service programs has been an ongoing concern of the Commission at least since the passage of the Telecommunications Act

³⁴ Similarly, as discussed previously, the eventual form of the RAF mechanism also should be addressed prior to finalizing a reform package.

³⁵ ITTA Comments at 11, PRTC Comments at 3 and ACS comments at 24.

of 1996.³⁶ Several states have developed robust universal service funds designed to work in concert with federal universal service funding mechanisms while other states have done little in this regard. With respect to the coordination of federal and state universal service policies, the Commission's reform policies should be designed to promote the continued involvement of those states with robust existing universal service funds and to encourage the remaining states to become more active partners in the implementation of universal service policy through the establishment of robust state-level programs. The leveraging of state funds, both in terms of a more efficient allocation of state and federal funding and the utilization of the greater state-specific knowledge at the state commissions, could greatly increase the deployment of broadband services well beyond what the Commission would be able to achieve on its own.

The Commission should develop a continuing and central role for the states in the implementation of its universal service goals, at least with respect to rate-of-return carriers. The state commissions have a much deeper understanding of the diverse challenges facing the small rate-of-return companies in their states and there is a long history between the federal and state regulatory bodies of working cooperatively to ensure the widespread availability of telecommunications and related services. This has been a largely productive collaboration and there is no reason for it to stop.

There are several roles for which the states are well suited and which would be beneficial to the Commission and the reasoned expansion of broadband service in all areas of the country. States could assist the Commission in ensuring that funds are being distributed to rate-of-return carriers in the most efficient and effective manner possible. Many states have developed their

³⁶ 47 USC 254 regarding the creation of the Federal-State Joint Board on Universal Service and 254(f) regarding State Authority.

own universal service funding mechanisms and such mechanisms have complimented the Commission's funding efforts and played a significant role in the expansion of telecommunications and broadband networks. At a time when the Commission is clearly grappling with constraints on available funding, it makes little sense for the Commission not to leverage existing state funding mechanisms. The Commission should continue to develop universal service policies that encourage states to develop funding mechanisms which can supplement the Commission's limited funding. The Commission's proposals should be evaluated and implemented in cooperation with the state commissions so as to ensure that the federal and state universal service mechanisms operate in tandem to produce the most beneficial results.

State commission support and expertise could be used in a number of ways to complement the Commission's efforts, leading to an even faster expansion of broadband services while at the same time ensuring that telecommunications services upon which many have relied for decades continue to be available. No matter the answer, the Commission cannot ignore the overriding interest that states have in both the expansion of broadband services and the continued availability of telecommunications and 911 services. As such, it is vital that the Commission develop and delineate the roles of state in its development of universal service policies.

VII. The Use of a National Cost Model to Distribute Support Will Not Produce More Efficient or Equitable Results.

In the FNPRM at paragraph 269 the Commission provides a set of parameters for its proposed stand-alone broadband funding mechanism for rate-of-return carriers:

1. Funding will stay with the \$2 billion budget.
2. The \$2 billion in funding must be distributed equitably and fairly.
3. The proper distribution mechanism is based on forward-looking costs.
4. Prevent double recovery by removing costs associated with the provision of broadband internet access service from the regulated rate base.

When reading these provisions together it is not hard to interpret them to mean that: 1) rate-of-return carriers are already receiving sufficient funding in the aggregate; 2) the only fair and equitable way to distribute the \$2 billion is to use a forward-looking cost model; and 3) the current distribution is not fair and equitable. The Commission's language makes clear that it believes that a distribution methodology based on a forward-looking cost model would lead to a more efficient allocation of federal support. PBA is not aware of any analysis that shows that the current mechanism is not fair or equitable or that any problems with the current methodology could not be corrected with minor changes, such as those the Commission proposes for the short term,³⁷ nor is PBA aware of any analysis that shows that the forward-looking cost model would produce fair and equitable results. In theory, one would expect forward-looking costs to be an appropriate distribution mechanism, however, in practice, the fairness of a distribution based on a forward-looking cost model depends on the how well the model captures the cost variations across individual carriers. Despite the extensive and lengthy evaluation of the cost model during the price cap CAF Phase II proceeding, a thorough analysis of the fairness of the resulting distribution of price cap funding was not completed. In fact, the Commission stated that in adopting the frozen support option for insular carriers, the Bureau noted that "a number of questions remained about the sufficiency of the model-calculated support in some non-contiguous areas."³⁸

³⁷ FNPRM at ¶ 259 through 266.

³⁸ FNPRM at ¶ 201.

A. The Law of Large Numbers Does Not Support the Use of Cost Models to Allocate Federal Support to Rate-of-Return Carriers.

The experience with the large non-rural carriers in the Commission’s previous universal service reform effort and the price cap carriers in the current one provides strong support for the notion that an engineering cost model, like any estimation model, will work better when estimated from and applied to larger data samples. When viewed in its entirety, a model may well describe, on average, the cost per location of deploying broadband services across a state or the entire country.³⁹ However, it is not likely to work as well when used to estimate the cost of a single location or the average cost in a single census block of a rural rate-of-return carrier. That said, a model may yield a reasonable estimate of the average cost per location across a state because a robust model will allow for the underestimation error for one location, one census block, or one rate-of-return carrier to be offset by the overestimation error from another. Thus, the relevant question for the Commission is whether the proposed model, or any model, can be expected to accurately describe the costs for a single small rate-of-return carrier where the opportunity for offsetting errors is very small.⁴⁰ For the larger, multi-state price cap carriers, the errors which will occur at the individual location or census block level will likely average out, such that the total amount of support available to the carrier will be adequate when averaged across its diverse support areas consisting of thousands of census blocks. Such a result is consistent with the law of large numbers theorem, which is used in probability theory to describe the likely results of performing the same experiment many times.⁴¹ The more observations

³⁹ The national average cost per location could then be multiplied by total locations to yield the estimated national total cost.

⁴⁰ Comments of the Rural Associations at page 17.

⁴¹ Hill, R Carter, Griffiths, William E, and Lim, Guay C, Principles of Econometrics, 2011, Page 702.

included in a given average, the more likely the average will converge to the true expected value. In terms of the proposed cost model, each observation represents the cost of providing broadband service per location within a given census block. The more census blocks served by a carrier, the more likely the average of the estimates made by the model at the census block level will converge to the carrier's true expected value which is the actual average cost of providing broadband across a company's entire service territory.

This theorem could be stated conversely that the fewer census blocks a company serves, the less likely that the estimated costs will approach the actual cost. Such results would present two problems for the Commission relative to the smaller rate-of-return carriers as compared to price cap carriers. The first is the windfall issue that occurs when the estimated costs exceed the actual costs and, therefore, model-driven support exceeds the efficient level. The second is the case where the model-estimated cost to build, operate and maintain a broadband network for a small rural carrier is less than the actual cost, thereby resulting in inadequate universal service support and thus depriving many Americans of needed broadband services.

For years the Commission and the Joint Board have been reluctant to use an engineering cost model to determine universal service support for rate-of-return carriers.⁴² At the heart of this reluctance is an understanding that a nationwide cost model is not likely to provide accurate cost estimates for smaller areas. Several reasons for this perception have been offered, including the inability of a model to adequately estimate the cost of a small company. However, a model's ability to accurately estimate the cost of a rural census block in Illinois served by AT&T likely is no better than the model's ability to estimate the cost of a rural census block served by Shawnee Telephone Company in the same state. The difference is that while the estimates for the AT&T

⁴² Universal Service First Report and Order, 12 FCC Rcd at 8889, ¶ 203.

and Shawnee census blocks likely have similar estimation error, the estimation error in the AT&T census block has a much greater chance of being offset by the error in the thousands of other census blocks served by the same company.

While the FNPRM makes clear that the Commission sees the eventual transition to model-based support for rate-of-return carriers as a certainty, at present it proposes that carriers be allowed to voluntarily elect support to be determined based on a forward-looking model.⁴³ However, it is equally clear that this option does not include an increase in the \$2 billion budget. The Commission notes that those voluntarily electing model-driven support will likely be those whose support is higher under the model.⁴⁴ This means that without some other adjustment there would be less funding available for those remaining under the current system. The most obvious adjustment would be to use the broadband reserve account to make up the difference. But it is equally obvious that this solution is only practical if the number of carriers that elect model driven support is relatively small.

The ability of a forward-looking cost model to fairly and equitably distribute a fixed amount of funding is more questionable when considering the differences between the price cap and rate-of-return companies. As discussed above, the annual budget for price cap carriers was increased by 67% or just over \$700 million. Such an increase can mask a large amount of error. Second, the price cap carriers are magnitudes larger than the rate-of-return carriers and the large areas served by the individual price cap carriers consist of varying and diverse geography and demographics. A model may underestimate cost in one part of a price cap carrier's operating areas but overestimate it in others. Consequently, the size and diversity of a large price cap

⁴³ FNPRM at ¶ 269.

⁴⁴ FNPRM at ¶ 289.

carrier's territories would allow for much of the error and bias inherent in a model to be neutralized, leaving the estimated overall support for the price cap carrier in a given state at a reasonable level. On top of that, the price cap carrier has the option to reject model-driven support in one state while accepting it in others. Rate-of-return carriers, on the other hand, typically operate in a small rural footprint inside a single state. There is little or no opportunity for model errors or biases to be neutralized and, moreover, the budget for rate-of-return carriers was not increased by 67% to help mask any other problems in the model-driven approach.

B. Current High Cost Support Mechanisms Have Been Effective and Need Not Be Abandoned Completely.

In the short term the Commission is proposing to adjust certain aspects of the current distribution mechanisms for rate-of-return support.⁴⁵ In the long term the Commission is proposing to scrap the current mechanism and replace it with a model-based approach. PBA believes that a more appropriate long term solution would be one that makes changes to the existing mechanism rather than one that completely discards a mechanism that has led to 91.1% broadband availability at 3 Mbps download/768 Kbps upload speed benchmarks as of June 2012.⁴⁶ While the Commission has stated its concerns about the sustainability of the current mechanisms⁴⁷, we do not believe that the critical issues could not be addressed with actions less drastic than scrapping the entire mechanism. Both the short-term and the long-term efforts are intended to further the Commission's goals of supporting "voice and broadband-capable networks where the market would not otherwise serve and to ensure that consumers in rural,

⁴⁵ FNPRM at ¶ 261-265

⁴⁶ *Four Years of Broadband Growth*, White House Office of Science and Technology Policy and the National Economic Council, Page 11, Figure 6.

⁴⁷ FNPRM at ¶ 259.

insular and high cost areas have access to reasonably comparable services at reasonably comparable rates.”⁴⁸ In the absence of thorough empirical studies or other evidence that supports the assumption that a model-driven mechanism is the most efficient, fair and equitable manner to distribute high cost support, the Commission should implement its short term measures to mitigate deficiencies in the current mechanism for a longer period. The recently established reporting requirements under FCC Form 481, amended as necessary, would provide a basis by which the Commission and state commissions could monitor the high cost support processes efficiently and effectively. To the extent that monitoring results indicate that additional components of the high cost distribution mechanism require adjustment, the Commission could propose additional adjustments under its standard rulemaking process.

In formulating its current proposals the Commission has assumed as given two factors that will dramatically impact rural rate-of-return LECs. It has assumed that the current \$2 billion in funding is the amount necessary for the rural rate-of-return LECs to expand broadband to all qualifying areas. This assumption appears to have been made without any analysis as to whether the current level of funding is sufficient. Given that the carriers’ public interest obligations likely will increase under CAF Phase II, the assumption that current funding is sufficient means that either the current level of funding has been too high or that the increased obligations come at no cost. The FCC has not undertaken any analysis to support either of these conclusions.

In addition, the Commission has accepted without any thorough empirical study that only a forward-looking cost-based mechanism will result in a fair and equitable distribution.⁴⁹ As a

⁴⁸ FNPRM at ¶ 267.

⁴⁹ Comments of the Rural Associations at pages 66-67.

result, the Commission believes that the current mechanism, even with adjustments, should be replaced. The problem, as discussed previously, is that any wholesale change in the distribution system will divide the rural LEC industry into either winners or losers. Individual carriers will find themselves in one category or the other regardless of how they have been using federal funding to achieve the Commission's goals of expanding broadband capability at reasonably comparable service and pricing levels. A carrier that has used its funding to expand broadband capability into the areas of its network where no economic case could be made for such an upgrade may find its funding significantly reduced on the basis of a model that, by virtue of its forward-looking nature, cannot be validated.

If the Commission continues on the course toward the use of a model-driven support distribution mechanism, the framework of a better solution to further the Commission's goals would start with a model-based allocation of fixed federal support on the state level for the reasons articulated in Section VII.A above. The Commission and the state commissions could work cooperatively to develop the appropriate mechanisms to allocate the support to the individual rate-of-return carriers within state jurisdictions, accounting for the unique circumstances faced by the carriers in those states.⁵⁰

Such a cooperative process would allow for the distribution of federal funding that accounts for the unique circumstances of individual RLEC and would achieve the Commission's underlying goal of expanding broadband availability in rural areas at a fixed budget. It would

⁵⁰ For example, the states could start with an analysis of the progress that carriers in their jurisdictions have made in expanding broadband and establish a broadband availability schedule. Once the results of such an analysis are known, individual carrier solutions, including expansion targets, may be developed to continue broadband deployment at the current rate or a quicker rate depending on the starting point of a carrier. Distribution of support among a state's carriers would consider the broadband deployment progress and the financial conditions for each carrier.

rely on a forward-looking model, not to distribute the funding at the company level, but rather to determine the amount of support for rate-of-return carriers at the state level.

The Commission has noted in the past the importance of establishing the proper incentives to move carriers in a direction that maximizes public interest. The incentives created in having the distribution of support being determined by an externally-developed hypothetical cost model may not be consistent with the Commission's goals. The framework for the solution described above represents a reasonable alternative to the complete replacement of the current support mechanism with a rate-of-return version of the CAM model. Not only will moving away from the current distribution mechanism under a fixed budget cause a large degree of chaos in the industry, the use of a forward-looking model as the primary distribution mechanism to individual carriers will cause some carriers to see their support dramatically reduced by a tool that is not easily validated and may not produce incentives consistent with the Commission's goals.

VIII. Conclusion.

The FNPRM outlines a number of Commission proposals to achieve its stated goals of increasing broadband availability in rural areas served by rate-of-return carriers and ensuring that service levels and rates in those areas are reasonably comparable to those available in urban areas. Among those proposals, the establishment of a fixed CAF Phase II budget for rate-of-return carriers at the current \$2 billion level of aggregate support represents a fundamental shift away from the actual cost-based mechanisms that determined support levels in the past. The fixed budget coupled with a simultaneous increase in accompanying public interest obligations will reduce the incentive and ability of RLECs to act in a manner that will lead to the achievement of the Commission's goals. The Commission's proposals will require that RLECs,

in aggregate, expend additional resources to comply with the newly-defined universal service obligations while receiving the same aggregate level of support. In addition, the proposed fixed budget effectively renders the current universal service reform for rural LECs to simply a determination of how to redistribute the current aggregate funding between individual carriers.

In addition to the challenges emanating from the imposition of a fixed budget, the Commission proposes in the long term to allocate the fixed CAF Phase II funding among rate-of-return carrier participants based on the results of a nationwide economic cost model that will estimate the costs of broadband provision for the rural rate-of-return carriers - a proposal based on an empirically unsupported conclusion that the use of a cost model represents the most efficient, fair and equitable manner by which to distribute CAF Phase II funds. Even assuming that is true, the recently completed process of development and evaluation of a nationwide cost model to distribute funding for price cap carriers demonstrated the challenges inherent in the application of a one-size-fits-all cost model to a diverse population of carriers. Even after more than two years of focused analysis and evaluation by the Bureau and industry stakeholders, significant questions remained as to whether the CAM 4.1.1 produced accurate results for insular price cap carriers, leading the Bureau to offer the option of the continuation of frozen support for CAF Phase II to those carriers. The challenge to adopt the CAM 4.1.1 cost model to accurately estimate the costs of the over 1,000 unique RLECs will be even more formidable.

Sensibly, the Commission proposes short term measures to mitigate certain shortcomings of the current high cost distribution mechanism that will be relatively simple to implement and will enable rate-of-return carriers to continue to receive specific, predictable and sufficient high cost support, as mandated by Section 254(b)(5) of the Telecommunications Act. Given the proven track record of the current mechanism that has led to a 91.1% broadband availability as

of June 2012, the Commission should implement its proposed short term measures for a longer period of time over which it, in cooperation with state commissions, can monitor the performance of the rate-of-return participants to ensure that CAF Phase II goals are being met under the terms of a manageable budget. The success of such an effort will be possible only if the state commissions are able to participate actively in the universal service process so as to employ their considerable knowledge with respect to the carriers under their jurisdiction and to ensure that the federal and state universal service programs are operated in a synchronized, efficient and complimentary fashion.

The Commission's proposal includes the adoption of a forward-looking cost model to distribute rate-of-return carrier funding at a carrier's option in the short term. In the long term the use of a cost model would be mandatory. Probability theory's Law of Large Numbers implies that a nationwide cost model will more accurately estimate costs at the state level than at a small rural company level, and to the extent that model-driven support is used to distribute CAF Phase II funds to rate-or-return carriers, the model should only be used to estimate support funding at the state level. The aforementioned expertise and jurisdictional-specific knowledge of state commissions applied in a coordinated effort with the federal support mechanism would at least ensure that model-driven support at the state level would be distributed among a state's rate-of-return carriers in the most effective manner.

Further, the redistribution of fixed funding, whether through the application of a cost model or some other method, will lead to the creation of sets of "winners" and "losers", i.e. those RLECs that see their funding increase or those that see their funding decrease. Even those companies whose funding remains close to the current level may find themselves to be "losers" if the public interest obligations adopted as a condition of the acceptance of FUSF support would

result in additional costs in excess of the support provided. Whether the same level of support or a reduced level of support will allow a RLEC to build out its network to increase broadband availability cannot be determined by a national cost model that does not consider the current state of the RLEC's network or its financial condition. Long term reform of FUSF for a RLEC should not reduce its support (or even maintain its support at current levels) without evaluating these conditions.

PBA believes that any long term solution that includes the use of a nationwide cost model in the reform of FUSF should limit the use of the model to the determination of support for rate-of-return carriers at the state level and should require that state commissions become more actively involved in the distribution of support to the RLECs under their jurisdiction. State commissions have a better understanding of the unique challenges faced by the RLECs in their states. This understanding and the state commission's ability to coordinate the distribution of federal funding with the state's own universal service efforts would allow for a more efficient allocation of fixed aggregate support to maximize the expansion of broadband availability at reasonably comparable rates.

The Commission's proposal "to establish a Connect American Fund based on a forward-looking model"⁵¹ illustrates its desire to move universal service mechanisms and interstate rate regulation to market-based regimes that are similar to those under which price cap carriers operate. Model-driven support and alternative regulation regimes, when viewed in a vacuum, can have positive attributes that may be favorable to RLECs, but only if they are implemented with the unique circumstances of the carriers in mind. The ability to evaluate the impact of such reform mechanisms is limited, however, particularly when they are implemented as part of a

⁵¹ FNPRM at ¶ 258.

reform package that includes a fixed budget equal to the pre-broadband level, unknown adjustments to a CAM 4.1.1 model developed for price cap carriers, unknown public interest obligations and future uncertainty regarding the continuing availability of FUSF support. Since any potential benefits from the reform mechanisms of model-driven support and alternative regulation may be dampened by the effects of other components of the reform package, the current uncertainty surrounding how RLEC support is to be determined may undermine the very behavior the Commission’s reforms are attempting to induce.⁵²

Respectfully submitted,

By: _____

David C. Blessing
Parrish, Blessing & Associates, Inc.
3975 University Drive – Suite 215
Fairfax, VA 22030
(703) 352-4830

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⁵² As Commissioner Rosenworcel noted in her statement attached to the FNPRM the uncertainty created by the changes made in the method used to determine RLEC support has hindered the RLECs “ability to invest in their network infrastructure.”