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

In the Matter of)	
Connect America Fund)	WC Docket No. 10-90
A National Broadband Plan for Our Future)	GN Docket No. 09-51
Establishing Just and Reasonable Rates for Local Exchange Carriers)	WC Docket No. 07-135
High-Cost Universal Service Support)	WC Docket No. 05-337
Developing an Unified Intercarrier Compensation Regime)	CC Docket No. 01-92
Federal-State Joint Board on Universal Service)	CC Docket No. 96-45
Lifeline and Link-Up)	WC Docket No. 03-109
Universal Service Reform – Mobility Fund)	WT Docket No. 10-208

COMMENTS OF THE NATIONAL ASSOCIATION OF STATE UTILITY CONSUMER ADVOCATES, MAINE OFFICE OF THE PUBLIC ADVOCATE, THE NEW JERSEY DIVISION OF RATE COUNSEL, AND THE UTILITY REFORM NETWORK

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Attachment A: Illustrative Wireline Merger/Sale Broadband Deployment Commitments

SUMMARY

The National Association of State Utility Consumer Advocates ("NASUCA"), the Maine Office of the Public Advocate, the New Jersey Division of Rate Counsel ("Rate Counsel"), and The Utility Reform Network ("TURN") (collectively, "Consumer Advocates") have grave concerns about many aspects of the voluminous and far-reaching, yet fundamentally flawed Order issued by the Federal Communications Commission ("FCC"), which significantly alters universal service funds ("USF") and intercarrier compensation ("ICC"). 1 Consumer Advocates nonetheless address issues that the FCC raises in its Further Notice of Proposed Rulemaking that relate to the implementation of the Order. As requested by the FCC, these comments specifically discuss the issues that the FCC identified in Sections XVII.A through XVII.K of the Notice. These sections of the Notice seek comment on rules concerning the processes for establishing broadband public interest obligations; eliminating support for areas with unsubsidized rivals; represcribing the interstate rate-of-return; setting limits on reimbursable capital and operating costs for rate-of-return carriers; designing reporting and accountability requirements; and designing mechanisms for allocating broadband support to providers and consumers in high cost and in remote, extremely high cost areas of the country.

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As set forth in the Order, and as further defined through rules to be issued as a result of this Notice, the FCC will be collecting, measuring and analyzing data relative to carriers' proposed and actual participation in the new, reformed USF programs and regarding matters that directly influence consumers, such as the performance and prices of carriers' broadband services. As an initial matter, any data relied upon by, collected as a result of, or related to the mobility fund, the Connect America Fund ("CAF"), and the Remote Area Fund ("RAF") should be public and should be provided to states on a regular basis. Publicly available data and information are essential not only to ensure accountability for the use by eligible telecommunications carriers of USF support, but also to inform consumers and policy makers about the status of the nation's progress in achieving ubiquitous, affordable broadband service.

The FCC seeks comment on various aspects of its new, reformed USF programs:

Broadband public interest obligations: Consumer Advocates support the Commission's establishment of baseline public interest obligations for any provider that receives support. The FCC's adoption of an *initial* minimum broadband speed benchmark of 4 mbps downstream and 1 mbps upstream for CAF recipients (with the exception of Phase I of the Mobility Fund and in areas with no terrestrial backhaul) combined with the standard of reasonable comparability between urban and rural areas, is a reasonable starting point. Also, as the FCC has recognized, broadband speed capabilities and requirements will evolve, and eligible telecommunications carriers' ("ETCs") performance should be updated accordingly. For that reason, it is essential that carriers deploy facilities that are scalable and able to evolve as bandwidth needs become greater over time.

Consumer Advocates support the FCC's proposed adoption of uniform measurement and reporting requirements. Comparable data is essential so that policy makers and consumers can

benefit from the ETCs' broadband service measurement reports. The FCC should collect and compare "rack" rates for broadband service, and possibly collect advertised rates to supplement this basic pricing information. The current standard for voice comparability is two standard deviations. Such a measure might be a reasonable metric for comparing broadband service prices, provided that the compared broadband services are standardized based on bandwidth and usage caps.

Consumer Advocates support ETC compliance with proposed interconnection requirements and network neutrality principles. Indeed, Consumer Advocates support the imposition of such requirements on *all* broadband service providers, regardless of the technology they use and whether they receive public support.

Association Plan ("RAP") because it is arcane, cumbersome, and is not transparent or supported by complete workpapers. The RAP does not fulfill the FCC's goal of supporting only areas where there are no unsubsidized broadband providers; does not incentivize the provision of increasing levels of broadband service; does not protect contributors to the fund from excessive carrier earnings; and does not contain a recognized ongoing role for state regulators. Consumer Advocates recommend instead the adoption of the State Members' plan with minor adjustments and the elimination of the access recovery mechanism contained therein (in light of the fact that the FCC has adopted another mechanism for access recovery). If the FCC adopts the RAP, it should seek recommendations from the Separations Joint Board due to the massive changes proposed to the separations procedures in the RAP and also address middle mile and Internet transport cost of service issues through the regulation of special access rates.

Interstate rate-of-return represcription: The FCC's resetting of the benchmark rate-of-return, last conducted in 1990, is long overdue. All components of the rate-of-return calculation require revision: capital structure, cost of debt, and cost of equity. Consumer Advocates recommend that the FCC use the average capital structure of rate-of-return carriers, and that the significantly lower interest rates that now prevail be recognized in the cost of debt. Further, unlike in 1990, larger carriers now provide not only local and exchange access services but also wireless, video and long distance services and face rival providers of some of these services. As a starting point for determining a fair cost of equity, the FCC should recognize the cost of equity for mid-sized carriers and similarly-situated carriers, because those carriers do not have, for the most part, large wireless affiliates and because those carriers have a tendency to serve more rural areas than the two largest carriers. The mid-sized and similar publicly traded carriers include CenturyLink, Windstream, Frontier, FairPoint, Cincinnati Bell, and ACS.

The regulatory treatment of broadband costs and revenues further complicates the FCC's assessment of the level of risk that rate-of-return carriers confront. Local loops are needed to provide both telephone services and digital subscriber line ("DSL") service, which allows broadband. Currently, carriers recover 100% of the costs of their local loops from their intrastate and interstate telephone rates but are allowed to retain all of the DSL revenues as unregulated revenues, which results in a rate-of-return that is understated. If instead, consistent with the earlier recommendations of NASUCA, Rate Counsel and the Maine Public Advocate, a fair share of the local loop costs were allocated to *unregulated* services *prior to jurisdictional* separations, the effect would be to more accurately measure the carriers' higher rate-of-return.

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² In the Matter of Jurisdictional Separations and Referral to the Federal-State Joint Board, CC Docket No. 80-286, comments of the National Association of State Utility Consumer Advocates, the New Jersey Division of Rate Counsel, and the Maine Office of the Public Advocate, filed August 22, 2006.

If no such an allocation is made, however, the FCC should ensure that broadband revenues are included in any assessment of carriers' rate-of-return. Further, the changes resulting from the FCC's recent USF reform, such as the cap on reimbursable expenses and on the USF support itself, may also affect the level of carriers' risk.

Eliminating support for unsubsidized rivals: Consumer Advocates welcome the FCC's elimination of support for areas with an unsubsidized rival or a combination of unsubsidized rivals. There are two separate elements of this reform. First, the FCC intends to eliminate support entirely in areas with 100% overlap with one or more unsubsidized competitor.

Consumer Advocates recommend that the FCC interpret its 100% benchmark as corresponding with levels within one percentage point of 100% overlap (i.e., if there is 99% or more overlap within a study area, support would be eliminated), because it is virtually impossible to obtain perfectly precise data about competitors' presence. Second, the FCC proposes rules that would adjust support levels in areas with less than 100% overlap. Consumer Advocates support rules that would ratchet down support in study areas as the percentage of overlap with a non-subsidized rival increases. Some support would still be provided for the areas of some overlap. Furthermore, the FCC has determined that "[a]|| CAF funding comes with obligations to build out broadband within an ETC's service area."

Limits on reimbursable capital and operating costs of rate-of-return carriers:

Consumer Advocates fully support the FCC's goal of allowing carriers to recover only prudent capital and operating costs, but disagree with the specific regression analyses that the FCC uses to develop caps. Consumer Advocates recommend that, in order to adopt a more accurate and better-informed regression estimation process, the FCC conduct an extended series of comments and reply comments. After all parties have had an opportunity to review and comment on the

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³ Order, at para. 103.

expanded analysis, the Wireline Competition Bureau could use its delegated authority to choose a preferred technique. In addition, Consumer Advocates recommend that the FCC move the implementation date to January 1, 2013 to allow this recommendation to be completed.

The proposed methodology requires substantial modification and verification before it can be accurately used to determine limits on reimbursable capital and operating expenses. The current methodology suffers from specification error; dependence on data sets that are not publicly available and may not be accurate; lack of verification of the regression equations; very low explanations of the variance of the dependent variable; unintended consequences that may provide incentives for carriers to game the system or to choose to invest in an uneconomical set of facilities; and a inappropriate method for applying the results of the regression analysis.

existing service obligations: The FCC seeks comment on possible adjustments to ETCs' existing service obligations as funding shifts to new, more targeted USF mechanisms. Under no circumstance should reduced support be accompanied by a relaxation of voice service obligations. Consumer Advocates commend the FCC's decision to reject calls to preempt statemandated voice service obligations. The FCC must protect the statutory goal of universal voice service (and ensure that voice service remains reliable and affordable) even as it pursues broadband deployment. Consumer Advocates further recommend that the FCC develop minimum standards for reliable voice service for any carrier receiving support, including the requirement that the service is likely to function during electrical outages.

Ensuring accountability: Consumer Advocates fully support the FCC's implementation of measures to ensure accountability. Although the funds are capped under the FCC's Order, all consumers, regardless of whether they reside in states that are net recipients of subsidies or net contributors, have a stake in making sure that USF monies are spent prudently.

Consumer Advocates support the FCC's proposal that a recipient of high-cost and CAF support be required to post financial security as a condition to receiving that support to ensure that it has committed sufficient financial resources to comply with the relevant public interest obligations. Consumer Advocates support strong measures to ensure that the CAF is safeguarded and that carriers' financial situations are sufficiently strong so as to enable them to continue to maintain and operate networks that have been funded with CAF subsidies.

Consumer Advocates welcome a diverse supply of broadband services that are offered to the widest range of consumers feasible. In seeking to achieve these objectives, Consumer Advocates urge the FCC to establish rules with sufficient accountability so as to filter out those carriers with financial situations that are so precarious as to jeopardize the integrity of the funds. Furthermore, Consumer Advocates recommend that the FCC adopt effective, administratively practical means by which the FCC can recover funds from carriers that fail to comply with the FCC's public interest obligations.

The FCC seeks comment on the triggers that should be used to impose remedies for failure to meet FCC requirements. Given the complexity of assessing compliance with the wide-ranging public interest requirements, the administrative burden of assessing compliance may be substantial. This complexity, of course, does not in any sense justify relaxing regulatory oversight of ETCs' compliance, but simply underscores the importance of having a clearly defined approach at the outset. Furthermore, Consumer Advocates recommend that all data, information, and communication regarding ETCs' compliance with the FCC's public interest obligations be public and also be provided to state public utility commissions. Because ETCs are benefiting from public monies, they should be fully and openly accountable not only to the FCC but to the general public. Maximizing transparency will create incentives for accountability.

Annual reporting requirements for mobile service providers: Consumer Advocates urge the FCC to adopt comprehensive, ARMIS-like reporting requirements for mobile service providers. Consumers pay for the CAF, and therefore should be able to hold providers fully accountable for the use of those public monies. Further, any and all such reports should be entirely public. All recipients of USF, no matter the technology, should also provide detailed information regarding outages. If the FCC, after reviewing recommendations that it receives in this proceeding, adopts additional outage reporting definitions or requirements for universal service recipients that differ from requirements that already exist under 47 C.F.R. Part 4, the FCC should consider updating those regulations as well, so that outage requirements apply to all carriers regardless of whether providers receive USF support. In other words, unless there is compelling reason to do otherwise, outage reporting requirements should be standardized across technologies and apply to all providers, regardless of whether they receive universal service support.

Auctions: The FCC's grant of right of first refusal to incumbent carriers violates the Competition in Contracting Act of 1984, and the reliance on reverse auctions exceeds the limited authority given to use reverse auctions for spectrum assignment. Agencies are not permitted to use sole-source procurements unless the written authorization of the Agency head is obtained and specific statutory or regulatory authority exists for sole source or limited competition. Every deviation from the requirement for full and open competition must be documented in writing and authorized by the appropriate government official. In view of the foregoing, Consumer Advocates believe the FCC must revisit the right of first refusal and the reliance on reverse auctions.

Furthermore, there are many aspects of the FCC's auction process that are troubling. First, by relying on auctions, the Commission increases the risks associated with the use of ratepayer funds. Simultaneously redirecting support to both fixed and mobility broadband services and applying untested auction methods increases the risks of waste, fraud and abuse. The Commission can point to no example of auctions being successfully applied in similar circumstances. Second, while ostensibly relying on auction theory to support its decision to distribute support through "competitive bidding," the Commission proposes to distribute support based on the lowest bids across a number of areas, rather than on bidding competition within geographic areas. This approach will support low-cost projects, regardless of whether they are economically efficient. Third, by the Commission's own admission, the criteria for distributing support for mobility funds may result in areas receiving support that would have been built out anyway. In fact, the existing high cost fund, through the identical support rule, has grown by nearly \$1.5 billion in order to fund wireless CETCs, yet there has been little accountability for the use of those funds and no showing that they were used to build facilities that would not have been built without support. In addition, support for mobile broadband should be conditioned on the elimination of bandwidth metering, which can result in unexpected high costs of consumers or limited service for a reasonable rate. As a result, the support of mobility broadband could waste ratepayer funds, and given the fixed budget that the FCC adopted in its Order, will result in lower levels of support for fixed broadband. Fourth, despite the consideration of extensive comment on the auction issue, the Commission failed to provide a reasonable set of guidelines for the development of final auction rules. The Commission points to the advantages of a sealed bid auction process, however, the Commission ultimately defers all auction design issues to its Bureaus. Fifth, while ostensibly favoring a sealed bid approach, which Consumer Advocates

agree provides a superior method for distributing support if the Commission is determined to pursue auctions, the Notice ultimately backtracks on the sealed bid proposal, as well as other critical safeguards. The Notice now requests new comments on issues that should have been settled already, and punts other issues to the Bureaus. Rather than resolving matters concerning the auction structure that have been pending for some time, the FCC's Order and Notice simply delegates many major issues to the Bureaus. Given that the efficient utilization of billions of dollars in ratepayer funds is at stake, Consumer Advocates are disappointed by the Commission's punting of major and complex matters.

Furthermore, the Commission's refusal to expand the contribution base to include broadband and data services means that, under the self-imposed budget constraint imposed by the Commission, the cost of delivering mobility network upgrades will come at the expense of the consumers of telecommunications services who are assessed to generate the "limited public funds" that are at the Commission's disposal. Consumer Advocates urge the Commission to refine its objectives regarding the delivery of mobility services in unserved areas to ensure that only telecommunications services are supported. The Commission should, as long advocated by Consumer Advocates, classify broadband (including interconnected VoIP) as a telecommunications service, and expand the contribution base accordingly, thus reducing the burden on consumers of telecommunications services, especially those consumers who still purchase only basic telephone service.

Remote Area Fund ("RAF"): In its Order, the FCC established an annual budget of at least \$100 million to deploy affordable broadband service to an estimated "less than one percent" of Americans who live in remote areas, where the cost of such deployment is "extremely high." In the Notice, the FCC seeks comments on various aspects of an RAF, which the FCC intends to

target support to these extremely costly-to-serve areas of the country. The rules that the FCC adopts for the RAF should include clear criteria for determining a fair way in which, each year, RAF subsidies are distributed throughout the country. Also, the probable inadequacy of the funds underscores the need for an efficient structure so that dollars are spent prudently. The goal of prudent spending could argue for dedicating RAF support where the highest number of eligible households could and would participate. The FCC has failed, however, to indicate, how it intends to balance the potentially conflicting goals of maximizing deployment (and subscribership) while ensuring that all regions of the country benefit fairly from the RAF.

The FCC describes various possible program structures for the RAF, and specifically proposes that RAF support be structured as means-tested portable consumer support. If the FCC decides not to implement means-tested portable consumer support, Consumer Advocates support the use of a request for proposal ("RFP")-based procurement process, consistent with NASUCA's comments in earlier phases of this proceeding. With the RFP process, after dividing the areas into those that are "very high cost," and those that are not, the Commission could use a procurement process to award contracts for each unserved area. Consumer Advocates continue to recommend that the bidding process be conducted in accordance with the regulations set forth in 48 CFR Subpart 15.2. Section 15.203(a) authorizes the use of RFPs for negotiated acquisitions and the RFP is the vehicle used to communicate the government's requirements to prospective service providers. The Commission should request technical and cost proposals from potential service providers and make an award based upon the best value to the government based upon technical and cost factors. The FCC should solicit bids from providers of fixed wireless providers that generally offer higher-quality services than satellite services. In addition,

the FCC should consider awarding free radio spectrum to such providers if that would allow for high quality affordable service in remote areas.

Alternatively, the FCC could delegate to states the option of using portable, means-tested consumer support or an RFP process. States likely are in the best position to assess whether an RFP-type process or a portable consumer support mechanism would better serve the goal of providing affordable broadband in the particular extremely high cost areas within their boundaries. The FCC could consider divvying up the \$100 million in proportion to the quantity of means-tested remote-area households in each state and then delegating authority to individual states to establish either portable consumer support or an RFP process as the most efficient and fair structure for achieving individual states' broadband goals and policies.

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COMMENTS OF THE NATIONAL ASSOCIATION OF STATE UTILITY CONSUMER ADVOCATES, MAINE OFFICE OF THE PUBLIC ADVOCATE, THE NEW JERSEY DIVISION OF RATE COUNSEL AND THE UTILITY REFORM NETWORK

I. INTRODUCTION

The National Association of State Utility Consumer Advocates ("NASUCA") as an organization, 4 and NASUCA members the Maine Office of the Public Advocate, 5 the New

⁴ NASUCA is a voluntary association of advocate offices in more than 40 states and the District of Columbia, incorporated in Florida as a non-profit corporation. NASUCA's members are designated by laws of their respective jurisdictions to represent the interests of utility consumers before state and federal regulators and in the courts. Members operate independently from state utility commissions as advocates primarily for residential ratepayers. Some NASUCA member offices are separately established advocate organizations while others are divisions of

Jersey Division of Rate Counsel ("Rate Counsel"), and The Utility Reform Network ("TURN") (collectively, "Consumer Advocates") hereby submit comments in response to the Notice of Proposed Rulemaking ("Notice") released by the Federal Communications Commission ("FCC" or "Commission"), specifically regarding the issues that the FCC identifies in Sections XVII.A through XVII.K of the Notice. 9 These sections generally seek comment on rules concerning the processes for establishing broadband public interest obligations, eliminating support for areas with unsubsidized rivals, represcribing the interstate rate-of-return, setting limits on reimbursable capital and operating costs for rate-of-return carriers, designing reporting and accountability requirements, and designing mechanisms for allocating broadband subsidies to providers and consumers in high cost and in remote, extremely high cost areas of the country.

larger state agencies (e.g., the state Attorney General's office). NASUCA's associate and affiliate members also serve utility consumers but are not created by state law or do not have statewide authority.

⁵ The Maine Public Advocate represents all consumers of utility services in Maine, pursuant to 35-A M.R.S.A. Section 1702. The Public Advocate and staff take actions to ensure that Maine's utility customers have affordable, high quality utility services. Under Section 1702(5) of the Maine statutes, the Public Advocate may appear on behalf of utility ratepayers in "proceedings before state and federal agencies... in which the subject matter of the action affects the customers of any utility doing business in the State....."

⁶ Rate Counsel is an independent New Jersey State agency that represents and protects the interests of all utility consumers, including residential, business, commercial, and industrial entities. The Rate Counsel, formerly known as the New Jersey Ratepayer Advocate, is in, but not of, the New Jersey Department of Treasury. N.J.S.A. §§ 52:27EE-46 et seq.

⁷ The Utility Reform Network ("TURN") is a California state-wide non-profit consumer organization that has represented the interests of California telecommunications, electricity and gas customers before California and federal regulatory agencies and legislatures for the past 35 years.

⁸ In the Matter of Connect America Fund, WC Docket No. 10-90; A National Broadband Plan for Our Future, GN Docket No. 09-51; Establishing Just and Reasonable Rates for Local Exchange Carriers, WC Docket No. 07-135; High-Cost Universal Service Support, WC Docket No. 05-337; Developing a Unified Intercarrier Compensation Regime, CC Docket No. 01-92; Federal-State Joint Board on Universal Service, CC Docket No. 96-45; Lifeline and Link-Up, WC Docket No. 03-109; Universal Service Reform – Mobility Fund, WT Docket No. 10-208, Report and Order and Further Notice of Proposed Rulemaking, released November 18, 2011. In these comments, references to the Report and Order are cited as "Order" and references to the Further Notice of Proposed Rulemaking are cited as "Notice."

⁹ Reply comments on these sections of the Notice are due February 17, 2012. Initial and reply comments on Sections XVII.L through XVII.R are due February 24, 2012 and March 30, 2012, respectively. Susan Baldwin, David Bergmann, Sarah Bosley, Dr. Robert Loube, and Dr. Trevor Roycroft assisted with the preparation of these comments.

Consumer Advocates represent consumers residing in states with a wide spectrum of diverse characteristics -- densely populated and sparsely populated states; states with consumers with wide ranges of disposable incomes; states that will be net contributors to the Connect America Fund ("CAF") and those that particularly require CAF subsidies to ensure that their residents will gain access to broadband services. Consumer Advocates' common interests, however, are that universal service funds be allocated in a fair and efficient manner with adequate and comprehensive mechanisms for accountability; voice and broadband rates should be affordable for all; and data relied upon by, related to, and collected as a result of the CAF should be made public.

Consumer Advocates share a common vision of a nation where broadband is deployed as ubiquitously and affordably as are highways and electricity, and where such deployment occurs in a timely manner, but caution that, unlike some other public goods, the quality of and prices for broadband services vary enormously, which greatly complicates the FCC's attempts to measure progress in achieving broadband goals. The rules that the FCC adopts in this proceeding, including any provisions that the FCC adopts for updating these rules to correspond with changing consumer demand and evolving technology, will affect how successful our nation is in deploying broadband services that are reasonably comparable in their quality and price for all citizens.

Although Consumer Advocates appreciate the opportunity to comment on the numerous and important questions raised by the Notice, the Order that provides the foundation for the Notice is fatally flawed, and, therefore, even with the best of resolutions of the issues still pending in the Notice, consumers will confront more harm than benefit. Among other adverse outcomes, the market place will not be functioning efficiently, consumers will be paying a

disproportionate share of the cost of reform to the intercarrier compensation regime and universal service funds, and the FCC will have unlawfully encroached upon states' rights. ¹⁰ Among some of the salient flaws that, regardless of the FCC's disposition of the remaining issues about which it seeks comment, prevent the FCC from properly addressing consumers' interests are the following:

- Despite the FCC assertions to the contrary,¹¹ consumers bear a disproportionate
 burden of the cost of reforming antiquated universal service and intercarrier
 compensation policies carriers' costs and revenues from all services offered over
 their networks should be examined fully before carriers receiving support are
 permitted to raise rates.
- The Order penalizes states that have been early adopters of broadband deployment goals. As penetration rates increase, the per-household cost of serving unserved households increases. Therefore, the incremental support level of \$775 that the FCC has determined to provide to carriers for each household that they serve is not a reasonable cost estimate for those states that have already achieved high levels of broadband penetration. ¹²
- The right of first refusal for incumbent local exchange carriers ("ILECs")¹³ disadvantages consumers in several ways. All consumers are paying for broadband

¹⁰ As the FCC is well aware, a number of parties, including NASUCA, have appealed the Order. Those appeals have been consolidated in the 10th Circuit Court of Appeals under *In re: FCC 11-161* as No. 11-9900.

¹¹ See, e.g., Order, at para. 36, in which the FCC discusses the new recovery mechanism, which will be assessed through a monthly Access Recovery Charge ("ARC") on consumers: "We anticipate that consumers will receive more than three times that amount in benefits in the form of lower calling prices, more value for their wireless or wireline bill, or both, as well as greater broadband availability." This is not the place to argue the error in the FCC's "anticipation."

¹² *Id.*, at para. 138.

¹³ *Id.*, at para. 166.

deployment through their universal service surcharges and therefore should be ensured that the funds are expended prudently – however, Consumer Advocates are unaware of any compelling evidence that ILECs are the most efficient broadband service suppliers. Those consumers who reside in unserved areas are potential beneficiaries of the supported deployment, but the consumer benefit is constrained by the FCC's unilateral choice to limit the diversity of potential suppliers. Providers other than ILECs, if given the same level of support that the FCC intends to provide to ILECs, might provide more affordable or higher capacity broadband service than the ILECs, especially if more granular geographic units are considered.

- The FCC has not heeded recommendations to broaden the base for universal service contributions to include broadband services, which means that the funds available to achieve broadband goals of deployment and affordability are unduly limited, and require telephone services alone to bear the burden of supporting broadband deployment.
- The transition to bill and keep for intercarrier compensation does not adequately reflect the cost of originating and terminating traffic.
- Until the FCC completes its reform of the separations process, the FCC will be working with flawed cost data.
- Until the FCC corrects the supracompetitive price levels of ILECs' interstate special access services, the broadband "middle" mile market cannot evolve efficiently.

- It is not evident why, although the FCC requires CAF recipients to offer standalone voice service, ¹⁴ the FCC does not also require CAF recipients to offer standalone broadband service. ¹⁵
- While allowing telecommunications charges to consumers to increase, the FCC has
 failed to reform the long-standing deceptive and anti-competitive billing practices of
 carriers, such as advertising rates that exclude the subscriber line charge ("SLC") and
 other charges.¹⁶

With these grave reservations, Consumer Advocates nonetheless address some of the questions that the Notice raises, and may comment on additional issues in their reply comments.

II. OVERARCHING ISSUES

A. Support from the CAF should not duplicate broadband deployment that would otherwise occur as a result of either regulatory obligations, market incentives, or access to other federal and state monies.

Broadband funds that are made available through the newly established CAF should be used efficiently and should not duplicate (a) market place incentives; (b) pre-existing regulatory obligations and industry commitments; or (c) other sources of public monies. CAF funds should not be awarded to build out broadband in areas where unsubsidized rivals already provide services at FCC-defined speeds. Consumer Advocates support the FCC's stated intent to prevent

¹⁴ *Id.*, at para. 80.

¹⁵ *Id.*, at footnote 127.

¹⁶ Note that recent new rules will require airlines to quote actual prices inclusive of surcharges, fees and taxes.

such an outcome.¹⁷ Instead, the focus of CAF funds should be to create the requisite incentives to encourage broadband deployment in unserved areas.¹⁸ Similarly, Consumer Advocates support the FCC's conclusion that no CAF or Mobility Fund dollars should be used to satisfy previous broadband deployment obligations, including federal and state merger commitments; Broadband Infrastructure Project ("BIP") deployment obligations; and state-funded deployment obligations.¹⁹ The FCC should proactively compile and track prior broadband deployment commitments (including information about speeds), and also seek information from states to gather and to confirm state-established obligations and speeds in order to ensure that no CAF funds are used in these areas for price cap carriers and rate-of-return carriers.²⁰ Toward that end, Consumer Advocates urge the FCC to require carriers to provide detailed geo-coded information regarding the areas in which they are deploying broadband service as a result of regulatory obligations, commitments, and public monies. The information should also include data on the broadband speeds being delivered to consumers. CAF funds are limited and it is essential to

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¹⁷ *Id.*, at para. 24, stating: "Importantly, the CAF will only provide support in those areas where a federal subsidy is necessary to ensure the build-out and operation of broadband networks. The CAF will not provide support in areas where unsubsidized competitors are providing broadband that meets our definition." See, also, paras. 103 and 281.

¹⁸ Consumer Advocates' support for limiting the use of consumer-provided funds to ensuring the presence of at least one broadband provider in all areas of the country should not be construed as a position that the presence of a single broadband provider in a market is sufficient to protect consumers from excessive rates, unreasonable terms and conditions, or poor service quality. The presence of just one broadband provider (a monopoly), or even two (duopoly) does not adequately protect consumers with respect to service quality, rates, terms, or condition of service. However, the primary objective of the CAF should be to encourage the provision of broadband access to all Americans at reasonably comparable speeds and price, with the least burden feasible on consumers through the universal service surcharge. There are not sufficient funds to support multiple providers in areas that now lack any providers. However, the fact that broadband markets are not competitive (regardless of whether there are one or two suppliers) underscores the need for regulatory oversight.

¹⁹ See, e.g., Order, at para. 105, Figure 1, where the FCC indicates that the CAF Phase I "obligation" is as follows: "Extend broadband to areas lacking 768 kbps according to National Broadband Map and carrier's best knowledge; can't use for areas already in capital improvement plan or to fulfill merger commitments or Recovery Act projects." See, also, *id.*, at paras. 146 and 342. Carriers receiving CAF Phase I support will be required to certify that "the carrier's current capital improvement plan did not already include plans to complete broadband deployment to that area within the next three years, and that CAF Phase I incremental support will not be used to satisfy any merger commitment or similar regulatory obligation." *Id.*, at para. 146. See, also, *id.*, at para. 342, discussing similar requirements for the receipt of Mobility Fund support.

²⁰ See, e.g., *id.*, at fn 233 for discussion of Verizon/Frontier and CenturyLink/Qwest commitments.

Attachment A provides a preliminary and illustrative overview of some of the broadband commitments that are associated with the FCC's approvals of several mergers and spin-offs of ILECs. The FCC should maintain an up-to-date, publicly available, comprehensive version of Attachment A.

B. Measures to address affordability barriers, regardless of where consumers reside, are essential.

Deployment is not sufficient to achieve broadband adoption. Consumer Advocates urge the FCC to move forward expeditiously to adopt broadband support for low-income households throughout the country so that rates are affordable, and consumers can then adopt broadband service. Of course, broadband should be affordable for all consumers, not just the lowest-income customers who need individual support. Consumer Advocates welcome the recent announcement by Chairman Genachowski of plans to reform and modernize the Lifeline program to include a broadband adoption pilot program.²¹ However, as NASUCA and Rate Counsel have previously stated, the time for *pilot* Lifeline broadband support programs is well past. ²² All Lifeline consumers, regardless of whether they live in extremely high cost, remote areas, or in densely populated regions should have access to affordable broadband service.

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²¹ "FCC Chairman Julius Genachowski Remarks on Reforming and Modernizing the Lifeline Program," Third Way," Washington, DC, January 9, 2012, at 3. See also, Fact Sheet: "FCC Chairman Genachowski Addresses Smart, Responsible Government and Reforms to Modernize the Lifeline Program for Broadband," January 9, 2012.

²² Federal Communications Commission Public Notice, "Further Inquiry into Four Issues in the Universal Service Lifeline/Link Up Reform and Modernization Proceeding," WC Docket Nos. 11-42, 03-109; CC Docket No. 96-45, DA 11-1346, August 5, 2011, Comments of NASUCA and Rate Counsel, August 26, 2011, at 3, citing *Lifeline and Link Up Reform and Modernization*, WC Docket No. 11-42; *Federal-State Joint Board on Universal Service*, CC Docket No. 96-45; *Lifeline and Link Up*, WC Docket No. 03-109, Notice of Proposed Rulemaking, rel. March 4, 2011, comments of Rate Counsel, April 21, 2011, at 27; reply comments of Rate Counsel, May 25, 2011, at 6...

C. The FCC should lower interstate special access rates.

The FCC's inaction in the special access proceeding is thwarting its efforts to achieve a national broadband network.²³ An important way to address "middle mile" broadband deployment is for the FCC to finally remedy the distorted, over-priced interstate special access rates that ILECs now charge. Special access – the high-capacity lines that provide connectivity to the communications backbone for fixed and mobile broadband services – is a critical input to broadband availability. For example, as the FCC observed in the National Broadband Plan ("NBP"), in rural areas, special access circuits "are sometimes the critical broadband link that traverses up to 200 miles between a small town and the nearest Internet point of presence."²⁴ The NBP also appropriately recognizes that special access rates for middle-mile and second mile connections directly affect the business case for small local exchange carriers', wireless carriers' and small cable companies' broadband deployment in rural areas. ²⁵ The NBP describes wide variation in rural rates for special access, and cites estimates in the range of \$50 to \$375 per month for 45 Mbps DS3 service. 26 As stated in the NBP: "It is not clear whether the high costs of middle-mile connectivity in rural areas are due solely to long distances and low population density, or also reflect excessively high special access prices as some parties have alleged."²⁷ The FCC should complete its investigation of interstate special access rates.

²³ In the Matter of Special Access Rates for Price Cap Local Exchange Carriers, AT&T Corp. Petition for Rulemaking to Reform Regulation of Incumbent Local Exchange Carrier Rates for Interstate Special Access Services, WC Docket No. 05-25.

²⁴ Federal Communications Commission, Connecting America: The National Broadband Plan, report submitted to the U.S. Congress, March 17, 2010 ("NBP"), Chapter 8, at 143. The American Recovery and Reinvestment Act of 2009 ("ARRA") was signed into law on February 17, 2009. American Recovery and Reinvestment Act of 2009, Pub. L. No. 111-5, 123 Stat. 115 (2009) ("ARRA"). As part of the Broadband Technology Opportunities Program established by the ARRA, the FCC was required to develop a National Broadband Plan.

²⁵ *Id*.

²⁶ *Id.*, at endnote 59.

²⁷*Id.*, at 143.

D. **Public Interest Obligations**

Any recipient (whether landline or mobile) of public monies (i.e., CAF support) should be required to provide broadband service on a stand-alone basis at reasonable rates; open access to its broadband networks and net neutrality, ²⁸ including collocation at reasonable rates, terms, and conditions.²⁹ Indeed these open access and net neutrality requirements should apply to all broadband service providers, regardless of whether they receive public monies.³⁰

Furthermore, public interest obligations should evolve to reflect changing consumer demand and technological advancements. Unlike other public goods (e.g., electricity and water) the quality of broadband service varies enormously. In its attempt to ensure that all consumers have access to broadband service, it is essential that the FCC ensure that the quality of the broadband offered is not widely disparate.³¹

²⁸ Open access refers to rivals' ability to access the underlying elements of the infrastructure at reasonable rates, terms, and conditions (e.g., the ability to purchase a broadband loop on a stand-alone basis). Net neutrality refers to the lack of discrimination by broadband service providers based on the content of the information that flows over the infrastructure. Some have observed: "We see little evidence that open access would be adopted voluntarily, in the absence of a strong policy framework that encourages its adoption." "Broadband Open Access: Lessons from Municipal Network Case Studies," William Lehr, Marvin Sirbu, Sharon Gillett, undated, at 28. http://people.csail.mit.edu/wlehr/Lehr-

Papers files/Lehr%20Sirbu%20Gillett%20Broadband%20Open%20Access.pdf

²⁹ See, e.g., TR Daily, December 19, 2011, "Verizon Wireless Open-Platform Prove Urged." *TR Daily* reported: "The FCC should investigate both recent reports that Verizon Wireless's new Android device does not support the Google Wallet mobile payment applications and reports from earlier this year that Verizon Wireless asked Google, Inc., to disable Verizon Wireless subscribers' access to third-party tethering applications in the Android Market application store, Stanford Law School professor Barbara van Schewick, director of the school's Center for Internet and Society, urged the FCC in a letter today. These practices appear to violate the open platform conditions on Verizon Wireless's 700 megahertz C block license, she added, echoing concerns that Free Press raised last week in a letter also asking the FCC to investigate Verizon Wireless (TRDaily, Dec. 13). Ms. van Schewick had backed Free Press's call for an investigation of the anti-tethering reports earlier this year (TRDaily, July 5)."

³⁰ In the Matter of Preserving the Open Internet, Broadband Industry Practices, GN Docket No. 09-191, WC Docket No. 07-52, Report and Order, released December 23, 2010; Id, Concurring Statement of Commissioner Michael J. Copps, at 141.

³¹ http://colorlines.com/archives/2011/12/the new digital divide two separate but unequal internets.html.

E. Broadband Service in Tribal Regions

Finally, the FCC devotes significant discussion to issues relating to broadband deployment in tribal areas.³² Consumer Advocates fully support the FCC's efforts to ensure that carriers deploy affordable broadband in tribal regions and Alaska Native regions. Consumer Advocates also support reasonable, but not unduly burdensome efforts to ensure that tribal entities participate fully in those efforts. Consumer Advocates anticipate that organizations representing and who are more familiar with tribal interests will address the various specific issues that the FCC raises in the NPRM. Consumer Advocates' lack of comment on these matters does not connote a lack of interest but rather deference to those organizations that are more expert in the questions that the FCC raises.

III. ISSUES FOR COMMENT

A. BROADBAND PUBLIC INTEREST

1. Background

The FCC seeks further comment on the public interest obligations that should apply to funding recipients.³³ Consumer Advocates support the Commission's establishment of baseline public interest obligations for any providers that receive support.³⁴ In the context of assessing the speed requirements for CAF beneficiaries, Consumer Advocates reiterate their disappointment that the FCC has granted ILECs the right of first refusal to deploy broadband in

³² See, e.g., Notice, at paras. 1165-1172, 1219.

³³ *Id.*, at paras. 1012-1030.

³⁴ Indeed, as mentioned above, many of the public interest obligations described by the FCC should apply to all broadband service providers, fixed and wireless, *regardless* of whether they receive support.

unserved areas.³⁵ As a threshold matter, the FCC's decision in this regard would seem to reward ILECs for their past failure to deploy broadband in a timely manner. For example, Verizon sold off territory to FairPoint Communications, Inc. ("FairPoint") and to Frontier Communications Corporation in numerous states in which Verizon had a poor track record of deploying broadband service. In New Hampshire, at the time of the New Hampshire Public Utilities Commission's review of Verizon's proposed sale to FairPoint, the FCC's then most recent high-speed services report indicated that only 59% of all end-user premises in New Hampshire where ILECs offered telephone service had any form of DSL services available to them.³⁶ By contrast, at that time (as of June 30, 2006), nationwide, 79% of U.S. residential consumers had xDSL available to them where ILECs offered local telephone service.³⁷ Also, Consumer Advocates are concerned that the right-of-first-refusal approach adopted by the FCC for distributing CAF subsidies will further promote the evolution of a two-tier broadband national network.³⁸ Furthermore, the right-of-first refusal rewards price cap carriers that have failed to invest properly in their networks. More than 83 percent of the approximately 18 million Americans

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³⁵ Order, at para. 166.

³⁶ Verizon New England Inc., Bell Atlantic Communications, Inc., NYNEX Long Distance Company, Verizon Select Services Inc. and FairPoint Communications, Inc. Joint Petition for Authority to Transfer Assets and Franchise to FairPoint Communications, Inc., New Hampshire Public Utilities Commission Docket No. DT-07-011, testimony of Susan M. Baldwin, on behalf of the Office of Consumer Advocate, filed August 1, 2007 at 102-103, citing FCC, Industry Analysis and Technology Division, Wireline Competition Bureau, *High-Speed Services for Internet Access: Status as of June 30, 2006*, rel. January 2007, at Table 14, available at http://hraunfoss.fcc.gov/edocs-public/attachmatch/DOC-270128A1.doc. In addition, the same FCC report indicated that at the time, 67% of residential consumers in Maine and 60% of residential consumers in Vermont had xDSL services available to them where an ILEC offers telephone service as of June 30, 2006. Baldwin Testimony, citing FCC Report, at Table 14.

³⁷ *Id.*, citing FCC Report, at Table 14.

³⁸ The FCC has previously observed that analysts predict that within a few years approximately 90% of the population likely will have access to speeds in excess of 50 Mbps (as a result of cable systems upgrading to DOCSIS 3.0). NBP, Chapter 4, at 42.

who lack access to fixed broadband live and reside in price cap study areas.³⁹ In many cases, this failure of price cap carriers to invest in broadband represented an abrogation of promises made to regulators when they sought approval of mergers or other regulatory relief.

2. Measuring broadband service

The FCC's adoption of an *initial* minimum broadband speed benchmark of 4 mbps downstream and 1 mbps upstream for CAF recipients (with the exception of Phase I of the Mobility Fund and in areas with no terrestrial backhaul) combined with the statutory standard of reasonable comparability between urban and rural areas is a reasonable starting point, but ideally should be revisited sooner than the scheduled review date of 2014. As the FCC has recognized, broadband speed capabilities and requirements will evolve and the FCC should continue to review and update performance requirements for ETCs in a timely manner, particularly because the review process itself will take time, further delaying any efforts by the FCC to upgrade the speed standard. Speeds that may be considered "basic" evolve quickly and the FCC's benchmark may become obsolete even with the three-year updates that the FCC intends to undertake. The FCC's excessive reliance on ILECs, rather than on all potential suppliers, to

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³⁹Order, at para. 127, with footnote 199 stating: "See National Broadband Map, available at http://www.broadbandmap.gov. Based on data as of December 2010, there were an estimated 18.8 million Americans who lacked access to terrestrial fixed broadband services with a maximum advertised download speed of at least 3 Mbps and a maximum advertised upload speed of at least 768 kbps. *Id.* For these purposes, terrestrial fixed broadband technologies include xDSL, other copper, cable modem, fiber to the end user, fixed wireless, whether licensed or unlicensed, and electric power line. To obtain the numbers of unserved people in price cap regions, staff used data from Tele Atlas North America representing boundaries of wire centers. These wire centers contain study area codes, which staff associated with USAC codes classifying those areas as either price cap or rate-of-return. Staff linked this set of data to the data underlying the National Broadband Map, which can be used to report broadband availability by study area. *See* http://www.broadbandmap.gov/nbm/summarize. The resulting link shows that, of the 18.8 million people without service, 83 percent are in price cap areas and 17 percent are in rate-of-return areas, as defined by USAC."

⁴⁰ Order, at para. 94. The FCC further adopted a latency benchmark of less than 100 milliseconds. Id., at para. 96. See, also, Figure 1, Id., at para. 105.

⁴¹ *Id.*, at para. 106. The FCC will analyze urban broadband offerings through survey data, and rural broadband offerings through the reporting requirements it adopts for CAF recipients with the goal of reasonably comparable broadband service. Id., at para. 106. A formal review of the speed requirements will occur every three years. *Id.*, at fn 174.

deploy broadband and the FCC's intention to wait until 2014 to "review" the minimum requisite speeds raise some concerns about the nation's ability to deploy a national broadband network that can keep pace with global standards.

In the Order, the FCC adopted a rule requiring ETCs to measure actual speed and latency on their networks.⁴² In the Notice, the FCC asks whether it should adopt a uniform methodology for measuring broadband performance⁴³ and whether it should adopt a uniform reporting format.⁴⁴ Consumer Advocates support the FCC's proposed adoption of uniform measurement and reporting requirements. As the FCC observes, the *Measuring Broadband America* report concluded that measurements could be standardized across a range of technologies.⁴⁵ Comparable data is essential so that policy makers and consumers can benefit from the ETCs' broadband service measurement reports.

Furthermore, Consumer Advocates strenuously oppose efforts to limit the public's access to performance data. As stated in the *Measuring Broadband America* report, a standard measurement has the potential

to provide consumers with more precise information about their actual service performance and to provide policy makers with an assessment of current and evolving broadband performance. By using sampling methodologies, additional network traffic from performance measurements can be kept to negligible levels. We note that today many ISPs make extensive network measurements for their own benefit. Extending the availability of sampled performance data to the consumer will likewise provide benefits to the end user and to content, application, and service developers.⁴⁷

⁴² *Id.*, at paras. 109-111.

⁴³ Notice, at para. 1013.

⁴⁴ *Id.*, at para. 1015.

⁴⁵ *Id.*, at para. 1014, citing FCC, Office of Engineering and Technology and Consumer and Governmental Affairs Bureau, *Measuring Broadband America: A Report on Consumer Wireline Broadband Performance in the US*, rel. August 2, 2011 ("Measuring Broadband America"), at 28.

⁴⁶ *Id.*. at 1016.

⁴⁷ Measuring Broadband America, at 28.

A simple certification from ETCs that their testing confirms their networks are meeting minimum broadband performance requirements would be inadequate. Further, there is no legitimate reason for affording broadband measurement data confidential treatment, yet the benefits of public access to the data are numerous. The market functions better with complete information. ETCs should also be accountable for the expenditure of universal service funds. Furthermore, the FCC's *Measuring Broadband America* report concludes that among many other benefits, consumer access to performance data may lower customer support costs. ⁴⁸ CAF recipients are using public funds to offer service and there is no reason that the characteristics of the supported service should remain confidential.

The FCC's position on whether it should grant relief from measurement requirements to smaller broadband providers is somewhat puzzling. To do so is antithetical to the goals of the CAF. The FCC asks: "If we ease performance measuring obligations on smaller broadband providers, how can we ensure that their customers are receiving reasonably comparable service?" The simple answer is that the FCC cannot adequately ensure reasonable comparability or monitor whether CAF recipients are meeting service requirements if the FCC grants waivers from reporting requirements. Customers served by small providers should receive comparable service, and all CAF recipients should have an obligation to show that the funds are being used to provide adequate service.

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⁴⁸ *Id.* The report concludes: "Consistent broadband metrics can help consumers assess their broadband service and compare service providers in meaningful ways. Actual data on broadband performance and deployment can serve as a tool for broadband providers by lowering customer support costs, by allowing consumers to verify performance of their broadband service without first contacting the ISP for support, and/or by facilitating an ISP's ability to assure that a consumer's service across all elements of an ISP's network is satisfactory. Such data can also assist the research community in understanding performance characteristics of consumer broadband services; encourage the development of future broadband testing methodologies; and lead to improvements in broadband policy and broadband deployment programs. Greater knowledge of the characteristics of consumer broadband performance can help facilitate the development of innovative Internet applications and services."

⁴⁹ Notice, at para. 1017.

3. Reasonably Comparable Voice and Broadband Service

Consumer Advocates are encouraged that the FCC has directed the Wireline Competition Bureau and Wireless Telecommunications Bureau to "develop and conduct a survey of voice and broadband rates in order to compare urban and rural voice and broadband rates." The FCC should collect data on stand-alone broadband service and also on bundled offerings that include broadband service. The FCC seeks comment on several aspects of the survey's content including differences between fixed and mobile voice services; fixed and mobile broadband service; speed comparisons; and promotional offerings. The FCC also asks whether in determining reasonable comparability, fixed and mobile voice services should be considered in the same category. In its Lifeline proceeding, the FCC determined that Lifeline recipients are entitled to a single voice service, landline or wireless, which suggests that for the purpose of public support, these voice services could be deemed reasonably comparable. A comparison to R-1 voice service would include an "all you can eat" monthly wireless service.

The FCC also seeks comment on (1) whether fixed and mobile broadband should have similar benchmarks for the purposes of evaluating reasonable comparability⁵³ and (2) whether it should separately collect data for fixed and mobile pricing and capacity requirements.⁵⁴ These are similar, yet distinct questions. Regarding the first question, although Consumer Advocates support reasonably comparable access to broadband services across the nation, to the extent that broadband access relies upon wireless service, comparable speed benchmarks do not appear to be

⁵⁰ *Id.*, at para. 1018.

⁵¹ *Id.*, at para. 1019.

⁵² In the Matter of Lifeline and Link Up Reform and Modernization, WC Docket No. 11-42, Federal-State Joint Board on Universal Service, CC Docket No. 96-45, Lifeline and Link Up, WC Docket No. 03-109, Report and Order, released June 21, 2011, FCC 11-97, at para. 7.

⁵³ *Id.*, at para. 1023.

⁵⁴ *Id.*, at para. 1021.

the FCC's short-term goal. As the FCC discusses in both its Order⁵⁵ and in its Notice,⁵⁶ the FCC has not adopted the same speed requirements for Phase I of the Mobility Fund as it has for fixed broadband service, and appears to conclude that, at least in the short term, fixed and mobile wireless are not comparable. Indeed, in the Notice, the FCC states: "By limiting reasonable comparability to 'comparable services,' we intend to ensure that fixed broadband services in rural areas are compared with fixed broadband services in urban areas, and similarly that mobile broadband services in rural areas are compared with mobile broadband series in urban areas." The FCC does, however, indicate that it seeks "comment on how to compare mobile broadband to fixed broadband as product offerings evolve over time." Consumer Advocates support the FCC's intention to revisit periodically whether wireless broadband speeds become comparable to wireline service. Regarding the second question (concerning data collection), Consumer Advocates support the collection of separate data for fixed and mobile pricing and capacity requirements – because the services should be easily identifiable as mobile or fixed, such a requirement would not seem to be unduly burdensome.

The FCC seeks comment on how it should compare pricing for fixed broadband services.⁵⁹ Consumer Advocates urge the FCC to consider the drawbacks of using advertised promotional rates as a basis of pricing comparisons. Advertised broadband rates often entail significant charges in the form of long-term commitments; the purchase of bundles; and early termination fees. Moreover, promotional rates are often short-term, increasing after a short period of time. Given variations in speeds, the FCC should prepare comparisons on a per

⁵⁵ See, e.g., Order, at fn 134.

⁵⁶ See, e.g., Notice, at para. 1022 and fn 2145.

⁵⁷ *Id.*, at fn 2145.

⁵⁸ Order, at fn. 134. See also, Notice, at para. 1024.

⁵⁹ Notice, at para. 1022.

megabit per second basis, and should also standardize prices based on download limits or "usage caps" that may be imposed by the service provider. At a minimum, the FCC should collect and compare "rack" rates, data speeds, and usage caps for broadband service, and possibly collect advertised rates to supplement this basic pricing information. 61

The FCC states: "In the Order, we also determine that rural rates for broadband service would be 'reasonably comparable' to urban rates under section 254(b)(3) if rural rates fall within a reasonable range of the national average urban rate for broadband service." The FCC seeks comment on how to specifically define that reasonable comparability benchmark. The current standard for voice comparability is two standard deviations above the average. However, when calculating the range of reasonably comparable rates, it must be recalled that voice service is a *standardized* service—both bandwidth and usage are standardized to ensure comparability. For a similar comparison to be applied to broadband services, some standardization will also be required.

⁶⁰ §54.312(b)(2) in the adopted rules (Appendix A to the Order) indicates that usage caps, if any, must be "reasonably comparable to comparable offerings in urban areas."

⁶¹ Note that many carriers tie their broadband service prices to the purchase of other services. For example, a cable provider may typically advertise a rate of \$45 for cable modem service but charge \$60 for customers who don't bundle the service with video services. Similarly, ILECs typically charge a substantially higher rate for standalone DSL service for customers who use an alternative voice service.

⁶² Notice, at para. 1025.

⁶³ *Id.*, at para. 1026.

⁶⁴ Prices for wireline voice services have been increasing, which suggests that the calculation of urban-rural comparability is overdue for being updated. The previous average urban rate was \$25.62. Consumer Advocates estimate that a more accurate national average urban voice rate, including local basic service, the subscriber line charge, surcharges and fees is \$26.95. This estimate reflects local rate changes for 20 of the 95 cities in the FCC's survey, which, collectively, represent 22 percent of the city weights. This analysis does not reflect any changes that may have occurred in surcharges and fees. Consumer Advocates estimated a standard deviation of \$5.04 compared to the published standard deviation of \$5.45. Combining this information, the published number that is used for triggering whether support is available is now \$36.52 (average plus 2*the standard deviation). Based on Consumer Advocates' estimate, a preliminary estimate of the revised number is \$37.03.

⁶⁵ The Commission's rules require the reasonably comparable standard to be based on data contained in the FCC's *Reference Book*. (See, for example, 47 CFR, §54.316(b)). The *Reference Book* classifies voice services into either "flat rate" or measured/message rate using "100 five-minute messages."

4. Additional Broadband Public Interest Obligations

Any recipient (whether landline or mobile) of public monies (i.e., CAF support) should be required to provide broadband service on a stand-alone basis at reasonable rates; open access to its broadband networks and net neutrality, ⁶⁶ including collocation at reasonable rates, terms, and conditions.⁶⁷ Indeed these open access and net neutrality requirements should apply to *all* broadband service providers, regardless of whether they receive public monies.⁶⁸

Furthermore, public interest obligations should evolve to reflect changing consumer demand and technological advancements. Unlike other public goods (e.g., electricity and water) the quality of broadband service varies enormously. In its attempt to ensure that all consumers have access to broadband service, it is essential that the FCC ensure that the quality of the broadband offered is not widely disparate.⁶⁹

⁶⁶ Open access refers to rivals' ability to access the underlying elements of the infrastructure at reasonable rates, terms, and conditions (e.g., the ability to purchase a broadband loop on a stand-alone basis). Net neutrality refers to the lack of discrimination by broadband service providers based on the content of the information that flows over the infrastructure. Some have observed: "We see little evidence that open access would be adopted voluntarily, in the absence of a strong policy framework that encourages its adoption." "Broadband Open Access: Lessons from Municipal Network Case Studies," William Lehr, Marvin Sirbu, Sharon Gillett, undated, at 28. http://people.csail.mit.edu/wlehr/Lehr-

Papers files/Lehr%20Sirbu%20Gillett%20Broadband%20Open%20Access.pdf

⁶⁷ See, e.g., TR Daily, December 19, 2011, "Verizon Wireless Open-Platform Prove Urged." *TR Daily* reported: "The FCC should investigate both recent reports that Verizon Wireless's new Android device does not support the Google Wallet mobile payment applications and reports from earlier this year that Verizon Wireless asked Google, Inc., to disable Verizon Wireless subscribers' access to third-party tethering applications in the Android Market application store, Stanford Law School professor Barbara van Schewick, director of the school's Center for Internet and Society, urged the FCC in a letter today. These practices appear to violate the open platform conditions on Verizon Wireless's 700 megahertz C block license, she added, echoing concerns that Free Press raised last week in a letter also asking the FCC to investigate Verizon Wireless (TRDaily, Dec. 13). Ms. van Schewick had backed Free Press's call for an investigation of the anti-tethering reports earlier this year (TRDaily, July 5)."

⁶⁸ In the Matter of Preserving the Open Internet, Broadband Industry Practices, GN Docket No. 09-191, WC Docket No. 07-52, Report and Order, released December 23, 2010; Id, Concurring Statement of Commissioner Michael J. Copps, at 141.

⁶⁹ http://colorlines.com/archives/2011/12/the new digital divide two_separate_but_unequal_internets.html.

В. CONNECT AMERICA FUND FOR RATE-OF-RETURN CARRIERS

1. Background

The Notice requests parties to provide focused comments on the Rural Associations Proposal ("RAP"). The RAP creates a new CAF support mechanism that is directly related to broadband service. This mechanism works through the separations process by changing the gross allocator for Cable and Wire facilities Category 1.3 and COE Category 4.13 equipment from 25 percent to 75 percent. The RAP also directly includes cost associated with middle mile and Internet transport. The RAP reduces support from current universal service support mechanism as the CAF support increases over a transition period.

While the RAP has some very interesting piece parts, Consumer Advocates see the RAP is more of a "Rube Goldberg" contraption rather than a comprehensive plan. Instead of adopting the RAP, Consumer Advocates recommend that the FCC adopt the State Members' plan⁷¹ with minor adjustments to align the State Members' plan with other changes that the FCC has adopted.

2. The RAP and the FCC's Rate-of-Return Carrier Budget

The RAP contends that it is designed to meet an initial budget projection of \$2.05 billion and a final budget projection of \$2.3 billion. These projections are both higher than the FCC's adopted budget of \$2.0 billion. The Notice asks how the RAP can be adjusted to meet the adopted budget.⁷²

⁷⁰ Notice, at para. 1032.

⁷¹ Comments by the State Members of the Federal-State Joint Board on Universal Service, WC Docket No. 10-90 et al. (filed May 2, 2011).

⁷² Notice, at para.1034.

To meet a budget constraint, the RAP, in similar fashion to the ABC Plan, 73 can alter the cost benchmark until the budget constraint is met.⁷⁴ The State Members' plan can also be adjusted to meet a budget constraint by increasing the revenue benchmarks for broadband and narrowband services. Thus, any plan can be adjusted to meet a budget constraint. However, at this point in time, the sponsors of the RAP have not provided detailed information on how they calculated their \$2.05 billion and \$2.3 billion estimates. Until that complete information is on the record, it is very difficult to understand the impact of reducing the RAP budget to \$2.0 billion. In one instance where carrier support was placed on the record, carrier support decreased by 34 percent under the RAP compared to current support. 75 If other carriers are impacted in a similar fashion, then total support would be calculated at \$1.34 billion rather than the reported \$2.05 or \$2.3 billion. Because it is not possible to evaluate whether the plan can meet the budget constraint due to the lack of information provided by the sponsors of the plan, Consumer Advocates recommend that the FCC secure the additional information, provide that information to the public and allow for comment regarding the information, before making any decision regarding adopting the RAP in part or in whole. As noted elsewhere, Consumer Advocates recommend that such a standard of openness and transparency must be adopted for all sections of this proceeding, including the adoption of the price cap carrier cost model, the Phase I price cap regression, and all other changes to the universal service mechanisms.

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⁷³ Letter from Robert Quinn, AT&T, Kathleen Abernathy, Frontier, Steve Davis, CenturyLink, Kathleen Grillo, Verizon, Michael T. Skrivan, FairPoint Communications, Michael Rhoda, Windstream Communications, Inc., to Marlene H. Dortch, Secretary, FCC, CC Docket No. 01-92, et al. (filed July 29, 2011). Attachment 2. In that Attachment support for price carriers was reduced from \$5.9 billion to \$2.2 billion through the introduction of a second benchmark, the alternative technology benchmark.

⁷⁴ *Id*.

⁷⁵ Letter from Tom Karalis, Fred Williamson & Associates, Inc. to Marlene H. Dortch, Secretary, FCC WC Docket No. 10-90, September 30, 2011.

In addition, Consumer Advocates note that there are indicators that the \$4.5 billion overall high-cost USF budget may not be sufficient to support a ubiquitous broadband network and allow for rural rates and services to be comparable to urban rates and services. First, when the industry filed its ABC plan, an industry filing suggested that price cap carriers would need \$5.9 billion and the rate-of-return carriers would need \$3.8 billion, levels that substantially exceed the \$1.8 billion price cap budget and the \$2.0 billion rate-of-return budget. ⁷⁶ Second, the FCC's broadband study suggested that the very remote customers would need \$13.4 billion in support compared to the annual \$100 million allocated to these customers by the budget adopted in the USF Order.⁷⁷ Third, the rate-of-return carriers currently receive \$2.0 billion in support plus intercarrier compensation revenue, while in the future, terminating intercarrier compensation revenue will be eliminated and support, including the support that replaces terminating intercarrier compensation revenue, will be limited to \$2.0 billion. ⁷⁸ Consumer Advocates recommend that the FCC increase the USF contribution base to include the broadband services. This increase in the contribution base is reasonable because the federal universal service fund is supporting broadband services. This is especially important if the above-noted indicators are correct and the budget for support is too small.

3. The RAP and Separations Rules

As noted above, the RAP proposes to apply a 75 percent interstate factor to two major investment categories, Cable and Wire Facilities Category 1.3 and COE Equipment Category 4.13.⁷⁹ These investment categories are two of the ILECs largest investment accounts. In 2007,

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⁷⁷ FCC, The Broadband Availability Gap, OBI Technical Paper No. 1, April 2010 ("OBI Report"), page 5.

⁷⁸ Order, at para. 126.

⁷⁹ Cable and Wire Facilities Category 1.3 are cable facilities that connect end-users to the central office. These type of facilities are commonly called the local loop. COE Equipment 4.13 is, for the most part, remote electronic

for the large reporting ILECs, Cable Wire Facilities Category 1.3 represented approximately 40 percent of total plant in service and COE Category 4.13 represented approximately 12 percent of total plant in service.⁸⁰ According to separations procedures, changing the allocation of these two investment categories not only changes the investment allocation, but also changes the allocation of plant specific (maintenance) expense, depreciation expenses, corporation operation expenses, network operations expenses, plus network and general support investment, depreciation and expenses.

Consumer Advocates recommend that if the FCC wishes to adopt the RAP, prior to that adoption, the FCC should request that the Separations Joint Board to provide the FCC with a recommendation regarding the separations change. Such a recommendation is necessary because the Separation change associated with the RAP is massive. Consumer Advocates do not believe that the referral to the Joint Board would substantially slow down the administrative process in this instance because the state members of the Joint Board have already recommended that the FCC adopt a series of changes in the separations rules that are similar to the RAP proposal.⁸¹

As NASUCA, et al. stated in 2006: "In all instances, this Part 64 allocation should occur before the jurisdictional separations process begins." 82 Further, special access plant should be directly assigned wherever possible.⁸³

equipment used to enhance loop facilities and the remote equipment's associated central office termination equipment.

⁸⁰ Estimates are based on data filed in the 2007 ARMIS 43-04 Report. Due to the fact that most ARMIS data are no longer reported, it is not possible to provide a more recent estimate of these relationships.

⁸¹ Letter from Steve Kolbeck, State Chairman, Federal State Joint Board on Separations to Marlene H. Dortch, Secretary, FCC, CC Docket No. 80-286, March 5, 2010; Comments of the National Association of State Utility Consumer Advocates, The New Jersey Division of Rate Counsel and The Maine Office of The Public Advocate, CC Docket No. 80-286, Attachment A: Affidavit of Susan Baldwin and Attachment B: Affidavit of Dr. Robert Loube, August 22, 2006.

⁸² In the Matter of Jurisdictional Separations and Referral to the Federal-State Joint Board, CC Docket No. 80-286, Comments of the National Association of State Utility Consumer Advocates, the New Jersey Division of Rate Counsel, and the Maine Office of the Public Advocate, filed August 22, 2006 at 7; see also affidavit of Susan

4. The Proposed RAP Rules

The proposed RAP rules are cumbersome, arcane, confusing and should not be adopted. The most offensive section of the proposed rules is the new section §36.606, Limitations on Loop Plant Eligible for Support. This section begins with a definition of "total loop investment [as] the current gross balance of loop investment adjusted for inflation using the Department of Commerce Gross Domestic Product Chain-type Price Index (GDP-CPI) (§36.606(a)(1))." This definition has at least two major flaws. First, there is no relationship between the GDP-CPI and the value of telephone facilities and equipment over time. Recent increases in the GDP-CPI have occurred at a slow and steady rate. Some telephone equipment increases in price, while other equipment decreases in price. Loop plant costs increase with construction labor costs and decrease with technological enhancements. Rather than using a general price index, if the plant is to be re-evaluated in terms of price, these investments should be tied to a telephone plant index that directly reflects the cost of loop plant. The industry has historically and continues to construct these type of indices.

Second, the inflation adjustment that re-evaluates the plant to generate a reproduction cost estimate of the plant should not be made. Such an adjustment does not generate a forward-looking estimate of the plant. Rather it inflates the value of old plant. A forward-looking estimate would also use the current year's price of the investments but it would first determine the economically efficient current plant mix. Because the proposed adjustment does not determine the economically efficient plant mix, the proposed adjustment is a mechanism to artificially inflate investment, rate base, cost and universal service funding. Moreover, the

Baldwin, on behalf of the National Association of State Utility Consumer Advocates and the New Jersey Division of Rate Counsel, filed August 22, 2006; affidavit of Dr. Robert Loube on behalf of the National Association of State Utility Consumer Advocates and the Maine Office of Public Advocate; filed August 22, 2006.

⁸³ *Id*, at 7.

annual allowed loop expenditure is capped using the inflated total plant investment and the accumulated depreciation of that inflated total plant investment.⁸⁴ The actual formula that caps the annual allowed loop expenditure appears to be as arbitrary as the old subscriber plant factor ("SPF") and just as arcane. 85 Moreover, because it is based on an artificially inflated value, the newly defined total loop investment does not represent a cap on investment – rather it simply allows carriers to enhance their plant without restriction.

The second major problem with the proposed rules is that there is no clear definition of the second mile as being separate and apart from feeder plant that is currently defined as part of the Cable and Wire Category 1.3 loop plant. Thus, while there discussion of the second mile in the proposed Part 54 rules, it is not clear what costs are in the second mile that have not already been allocated to the last mile costs through the operations of the existing rules.

5. The RAP, middle mile and Internet transport costs

The RAP proposal recommends that the cost of service should include middle mile and Internet transport costs. These are costs that must be incurred to provide broadband services. The middle mile covers the cost of transporting messages from a local carrier to an Internet backbone carrier. Internet transport costs are cost of using Internet backbone provider services. Middle mile costs include the cost of purchasing special access services by small rate-of-return carriers from large price-cap carriers. The rates for these services have, in many instances, been detariffed or priced at levels that do not reflect the forward-looking cost of providing service.

⁸⁴ It is not clear how accumulated depreciation or annual depreciation will be calculated. If the annual depreciation is based on the current year investment, then the annual depreciation will reflect the current year investment reevaluated using the price index. The accumulated depreciation, the sum of the current year investment, will reflect that regular change in the value of the plant. In this case, the impact of inflation would be to reduce the loop depreciation factor. However, the accumulated depreciation could be re-calculated such that the previous years' values also change with the revaluation of the plant. In this later case, the loop depreciation factor would be not be

affected by the inflation rate. ⁸⁵ See Proposed §36.606(f)(1).

With regard to Internet transport costs, the rate-of-return carriers, being for the most part Tier 3 carriers, actually pay for the use of the Internet. That is, these carriers are not considered peers and thus do not qualify to participate in the bill-and-keep peering arrangements of larger carriers.

The result of these high middle mile and Internet transport costs is that rate-of-return carriers charge prices for Internet services that are higher than their urban counterparts.

Therefore, in order to allow the rate-of-carriers the opportunity to charge affordable and comparable Internet service rates, it is necessary to include middle mile and Internet transport costs in whatever CAF rate-of-return mechanism the FCC adopts.

6. The RAP and the Broadband Service Criteria

From a technical provisioning standard, it is generally recognized that most rate-of-return carriers that provide broadband service can provide the 4 Mbps downstream service using a network design with a maximum copper loop length of 12,000 feet and ADSL2 cards. There are, however, two problems with the proposed criteria. First, many parties commented that the 1 Mbps upstream criterion would be very costly to implement. These parties simply stated this view and did not explain why the problem exists. Therefore, Consumer Advocates recommend that those parties that have stated this view should be required to provide detailed engineering and economic reports that support that view. If those parties cannot provide those studies, then Consumer Advocates would support the 1 Mbps upstream criterion. If those studies were produced, then Consumer Advocates would evaluate the studies and reply to those studies at the appropriate time.

The second problem, whether to adopt the 4 Mbps downstream criterion, is not a technological problem. Rather it is problem associated with high middle mile costs. Many rate-of-return carriers are capable of providing service at the 4 Mbps speed. However, if that speed is offered and many customers purchase that service, then the middle mile costs to the rate-of-

return carriers increase substantially. At that point, the rate-of-return carrier has the choice of either increasing the price of high speed tier to reflect the higher middle mile costs or accept very low or negative profits for its Internet service. Rather than being forced into making such a choice, it is our understanding that the rate-of-return carriers simply refrain from offering the higher speed service products. To resolve that problem, the FCC can either regulate the price of special access middle mile service offerings such that the price reflects the forward-looking cost of service or include the cost of middle mile services in the CAF mechanism. Once the FCC takes either of the two appropriate actions, then it would be reasonable to adopt the 4 Mbps downstream criterion. The FCC should also ensure that the costs associated with middle mile infrastructure reflect the federal support that was already provided for that infrastructure as part of the stimulus program from the ARRA.⁸⁶

7. The RAP and the State Members' plan

The RAP initiates a single new mechanism that is hidden beneath arcane rules and has not been supported by a complete set of work papers. The RAP is not integrated with the FCC's goal of supporting only areas where there are no unsubsidized broadband providers, is not linked to incentives that provide ever increasing levels of broadband service, does not protect contributors to the fund from excessive earnings and does not contain a recognized ongoing role for state regulators. The State Members' plan, on the other hand, supports the FCC's goal of focusing support on areas where broadband service does not currently exist, because the State Members' plan focuses support on the "donut" areas of service territories. The State Members' plan provides an incentive to reach the FCC's goal of 4 Mbps downstream by tying support to the broadband availability criterion. The State Members' plan provides an incentive for states to participate in funding broadband service. The State Members' plan also prevents support from

⁸⁶ See footnote 24, supra.

allowing carriers to earn excessive profits, while at the same time the State Members' plan recognizes that there is a relationship between the "donut" and the total company. That is, equipment, such as switches, and facilities, such as feeder plant, are used both by customers in the "donut" and the "hole." If the carrier as a total company is not financially viable, then the carrier cannot provide services in the donut. Thus, the State Members' Plan not only reviews the financial health of the carrier at the "donut" level but also reviews the financial health of the company at the total company level.

The problems with the State Members' Plan include the definition of the "donut," the determination of loop cost in the "donut," and whether the Plan can meet the FCC's budget constraint. With regard to the definition of the donut, that problem can be solved by defining the donut as any place within the study area where an alternative unsubsidized broadband provider is not providing service. With regard to the determination of loop cost in the donut, the relative cost of loop plant in the donut to the hole can be set on the basis of the forward-looking model. Every forward-looking model estimates construction costs based on relative density.

The allocation of total company embedded loop investment between the donut and the hole could be performed consistent with the following example: Assume that the forward-looking construction cost in low density areas such as the donut is half of the forward-looking cost in the hole. Further assume that embedded loop investment is \$1,000,000 and that there are 6000 feet of "donut" plant and 4000 feet of "hole" plant. Weighting the 4000 hole feet by 2 to recognize the higher cost of construction allocates 57 percent of the embedded cost of the loop to the "hole" rather than the 40 percent allocation that would be allowed if just relative feet were used as an allocator. Finally, as noted above, the State Members' Plan support can be forced to

equal the FCC budget constraint by changing the narrow band and broadband revenue benchmarks.

It should be noted that NASUCA has previously criticized the State Members' Plan because the Plan allowed for complete recovery of current access revenue. However, because the FCC has established a separate recovery mechanism for access revenue, Consumer Advocates now recommend that the access recovery mechanism in the State Members' Plan be eliminated in its entirety.

C. INTERSTATE RATE-OF-RETURN REPRESCRIPTION

In the Notice, the FCC asserted that it is time to re-examine the authorized rate-of-return to be applied to common line and special access services.⁸⁸ The FCC requested comments related to the various piece parts of the overall rate-of-return. That overall return is the weighted average cost of capital ("WACC"). The WACC is calculated as the percent equity times the cost of equity plus percent debt times the cost of debt. The FCC also requested comments on how a new return would impact universal service funding.⁸⁹

The last time the FCC prescribed the rate-of-return was in 1990. Since that time there have been substantial changes in the underlying economic factors and in the telephone industry.

⁸⁷ NASUCA Reply Comments, pp 7, 162-3.

⁸⁸ Notice, at para. 1044. While the rate-of-return calculation will no longer be used to determine interstate access rates, that change in rate-making methodology does not transfer the revenue requirement to the intrastate jurisdiction nor does it relieve the FCC of its responsibility to allow the carriers the opportunity to earn the allowed rate-of-return. In this proceeding, due to the limitation on the total universal service budget and prescribed reductions in access rates, there is an appearance that the FCC is not allowing the carriers to have the opportunity to earn the allowed rate-of-return.

⁸⁹ *Id.*, at para. 1058.

⁹⁰ In the Matter of Represcribing the Authorized Rate-of-Return for Interstate Services of Local Exchange Carriers, CC Docket No. 89-624, Order, FCC 90-315, released December 7, 1990, corrected December 21, 1990 ("1990 Prescription Order").

For example, in 1990 the interest rate on one-year treasury notes was 8.0 percent and on 30-year treasury bonds was 8.4 percent. 91 Currently, the interest rate on one-year treasury notes is 0.12 percent and on 30-year treasury bonds is 3.03 percent. 92 On the other hand, in 1990 local exchange carriers were local monopoly providers of local and exchange access services. Currently carriers, especially larger carriers, provide not only local and exchange access services but also wireless, video and long distance services and face rival providers of some of these services. Due to the changes in the economy and to the telephone industry, Consumer Advocates agree with the FCC that it is (well past) time to re-examine the authorized rate-of-return. Consumer Advocates, however, recommend that the FCC must not only look at factors that reduce the WACC, such as the reduction in interest rates and additional revenues for non-rate-ofreturn regulated services, but the FCC must also reflect on factors that may increase the WACC, such as the frozen separations rules and the reduction of revenue associated with the FCC universal service budget constraint for rate-of-return carriers. To estimate the WACC, it is necessary to determine a cost of debt, the percentage of debt and equity in the capital structure and the cost of equity. These comments will address each of these factors.

1. The Cost of Debt

The cost of debt is the interest rate paid to borrow funds. This cost can measure either as the forward-looking cost or an embedded cost of debt. The forward-looking cost of debt is the current or immediate future interest that the carriers expect to pay. With regard to rural rate-of-return carriers, this interest can easily be obtained by asking the Rural Utility Service what interest rate it charged for new loans in 2011 or what interest rate it expects to charge for new

⁹¹ *Id.*, at 170.

⁹² FRB: H.15-Selected Interest Rates, Web-only Daily Update-January 5, 2012, www.federalreserve.gov/releases/h15/update/

loans in 2012. The answer to both questions is probably between 3 and 5 percent. The embedded cost of debt is the sum of the interest payments divided by outstanding debt. This can be measured for only long term debt or for all debt instruments. The problem is that we do not know this number for all rate-of-return carriers and the number will not be known even though the FCC, through the Order, increased the reporting requirements for rate-of-return carriers because those reporting requirements are not systematic and are not complete. 93 To make the reporting requirements systematic, the FCC should modify the ARMIS 43-01 and 43-02 B-1.A income and balance sheet reports to conform to its current needs, and require the rate-of-return carriers to file these two modified ARMIS reports. With regard to the cost of debt, this means that the ARMIS 43-01 Report would include rows for short-term and long-term interest payments, and the 43-02 B-1.A Report would include rows for short-term and long-term debt instruments. These reports should be made public and placed on the FCC's web page in a manner similar to the current ARMIS reports.⁹⁴ The reports are incomplete because the publicly traded companies are not required to file the data. 95 While the FCC might be able to secure some of the data for the publicly traded companies from SEC filings, those filings are not in the format that the FCC needs to fulfill its mission and therefore, Consumer Advocates recommend that the all rate-of-return carriers file the reports.

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⁹³ In addition, the start date of April 1, 2012 placed a heavy burden on the carriers. Consumer Advocates recommend that the start date should be April 1, 2013 for rate-of-return cost carriers and April 1, 2014 for rate-of-return average schedule cost carriers.

⁹⁴ The other modifications that are necessary would be to introduce new columns in the 43-01 between total company and subject to separations for major lines of business that are not subject to rate-of-return regulation. These columns would be video, Internet services, and long distance services. Currently the non-regulated services columns include only services that are provided by the telephone company, such as voice mail box service or inside wire service, or by affiliates that are owned by the telephone company. In many instances, video and Internet services are provided by affiliates that are owned by the holding company and not by the telephone company, and therefore, the activities of those affiliates were never reported. Consumer Advocates recommend that if the affiliate sells to customers of the telephone company, jointly uses the telephone company's infrastructure, jointly bills or jointly markets a service, then the affiliates' activities should be reported.

⁹⁵ Order, at para, 596.

Once the data is collected, it will be possible to determine the embedded cost of debt as the sum of the interest payments divided by the sum of the debt instruments. Consumer Advocates recommend that the embedded cost of debt be adopted as the cost of debt in this instance because these debts instruments and interest payments reflect the financial commitments the carriers have already made and the financial commitments that the carriers must obtain revenue to repay.

2. Capital Structure

The capital structure determines the percent debt and the percent equity. In the 1990 Prescription Order, the FCC chose to use the capital structure of the Regional Holding Companies rather than the capital structure of the Bell Operating Companies or the capital structure of the smaller carriers. That decision had the impact of reducing the WACC by increasing the debt percentage. The ownership of the Regional Holding Companies, however, has changed substantially since 1990. Moreover, the two large dominant carriers currently receive significant wireless and special access revenues, revenues that are not reflective of the activities of the rate-of-return carriers. Therefore, it would be incorrect to use the capital structure of the Regional Holding Companies today. Instead, Consumer Advocates recommend that the FCC use the average capital structure of the rate-of-return carriers. That capital structure reflects the financial commitments of the carriers. In addition, it would not allow small carriers, with high debt percentages, to earn above normal equity returns. For example, a small carrier

⁹⁶ 1990 Prescription Order, at 8.

⁹⁷ In 1990, the major revenue sources of the large and small carriers were the same: local exchange rates and interexchange access charges.

with 80 percent debt in its capital structure earns a return on equity of 21 percent under the current 11.25 percent benchmark, rather than the authorized 13.2 percent. ⁹⁸

3. The Cost of Equity

The cost of equity should allow carriers to earn a return that is commensurate with the returns earned by companies having corresponding risks and should ensure the carrier's financial integrity such the carrier can maintain its credit and attract capital. As with the capital structure, the focus of the 1990 Prescription Order was on the cost of equity associated with the larger carriers. In a similar fashion, due to the changes in the industry, it is no longer reasonable to use the risk associated with the large carriers, such as AT&T and Verizon, to estimate the cost of equity for the rate-of-return carriers.

To start the analysis of the cost of equity, that cost should be determined for the midsized carriers and similarly-situated carriers because those carriers do not have, for the most part, large wireless affiliates and because those carriers have tendency to serve more rural areas than the two largest carriers. The mid-sized and similar publicly traded carriers include CenturyLink, Windstream, Frontier, FairPoint, Cincinnati Bell, and ACS.

The analysis of the cost of equity, however, cannot end with the development of a proxy cost of equity related to the above-mentioned carriers. Instead, it must analyze the nature of the broadband market and the separations rules associated with how carriers have an opportunity to earn a return in the broadband market.

The current separations rules shift broadband revenue to either the non-regulated sector or the interstate jurisdiction while keeping broadband cost in the intrastate jurisdiction. This improper separation artificially increases the interstate earned rate-of-return and artificially

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⁹⁸ 1990 Prescription Order, at footnote 311.

⁹⁹ Federal Power Commission v. Hope Natural Gas Company, 320 U.S. 591 (1944).

reduces intrastate rate-of-return. NASUCA, the state members of the Federal-State Joint Board on Separations, and the Rural Associations have recommended that the cable and wire gross allocator be increased to 75 percent for lines providing broadband services. ¹⁰⁰

In order to allow rate-of-carriers the opportunity to earn the allowed return on a reasonable rate base that includes the properly assigned interstate cable and wire facilities using the 75 percent broadband allocator, the Interstate Common Line Support ("ICLS") mechanism would have to revise the ICLS revenue requirement and establish a new revenue offset that reflects the broadband market.

Increasing the gross allocator to 75 percent for lines providing broadband service, holding everything else constant, would probably double the current ICLS and could triple that support if all consumers purchase broadband services. Off setting those increases would be the reduction in the rate-of-return and the application of capital and expenses reimbursement caps to ICLS. Reducing the rate-of-return to 8 or 9 percent reduces ICLS by approximately 3.5 to 5 percent. Applying the capital and expenses reimbursement caps reduces ICLS by approximately 15 percent. Combining these revenue requirement adjustments would result in a net increase ICLS to approximately \$1.4 to \$2.1 billion depending on how many customers purchase broadband services.

¹⁰⁰ This percentage is less than the cost causation level based on relative usage or broadband availability. Cost causation and broadband availability would shift over 90 percent of the plant to the interstate jurisdiction. See Dr. Robert Pepper, Through the Looking Glass: Integrated Broadband Networks, Regulatory Policy and Institutional Change, FCC, OPP Working Paper Series No. 24, November 1988. In addition, many rate-of-return carriers have broadband availability rates of above 90 percent. Rebuttal Testimony of Dr. Robert Loube on Behalf of the Maine Office of Public Advocate, Investigation into Line Sharing Pursuant to State Law, Maine PUC Docket No. 2004-809, March 18, 2005.

¹⁰¹ This estimate is based on the NECA, December 16, 2011 confidential filing.

¹⁰² This estimate is based on the estimated \$110 million reduction in cost carrier support compared to the current cost carrier HCL support of \$779 million. See Notice, at para. 1084 and the NECA Universal Service Filing, September 30, 2011, transition.fcc.gov/wcb/iatd/neca.html.

The new revenue offset should add net revenues associated with a bundle of services that would include a reasonable broadband service at a price that is comparable to prices charged by other carriers. The net revenue calculation would subtract the national average basic local service rate, the cost of purchasing middle mile, Internet transport and wholesale long distance services from the bundle price, because the basic service rate is allocated to support the state jurisdiction revenue requirement, and the other service costs are beyond the control of the rural rate-of-return carrier. The most recent estimated national average basic local service rate was \$15.62 for 2007. However, given deregulation in many states and allowed rate increases in other states, for example in California, the AT&T local service has increased from \$10.69 to \$19.95, our best estimate of the current rate is approaching \$17.00. 104 At this time Consumer Advocates do not have data regarding middle mile, Internet transport or wholesale long distant service costs. If the FCC reduces special access rates to total long-run incremental cost ("TELRIC") rates, middle mile costs will be reduced. If the FCC applied its bill-and-keep regime to Internet transport charges, then these charges will approach zero. Finally, Consumer Advocates note that if the FCC requires wholesale long-distance carriers to pass access savings through to the local rate-of-return carriers, then wholesale long distance charges would decrease substantially. Thus, if the FCC takes all three actions enumerated above, then the net revenue associated with the comparable broadband rate increases, and the ICLS will decrease.

While Consumer Advocates have not completed a survey of the comparable broadband rate, one possible rate would be \$60.00. This is a common price for Internet service at 3 to 6

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 $^{^{103}}$ Reference Book of Rates, Price Indices, and Household Expenditures for Telephone Service, FCC, 2008, Table 1.2.

¹⁰⁴ We also note that local rates have been increasing steadily over time and therefore, Consumer Advocates assert that it is likely that the carriers will increase their SLCs to incorporate the full amount of the allowed ARC increase. Such action significantly decreases the benefits of the FCC's intercarrier compensation rule changes.

mbps downstream and unlimited local and toll service.¹⁰⁵ If the per line net revenue is approximately \$20.00 per month, using 5,046,476 cost and average schedule ICLS supported lines, total net revenue would be approximately \$600 million to \$1.2 billion.¹⁰⁶ Combining the net revenue estimates with the estimated revenue requirements would keep ICLS at approximately \$800 to \$900 million, which is very close to the existing amount of ICLS received by the cost and average schedule carriers.

While the above estimates are subject to verification when the FCC obtains the required data, it is not appropriate to reduce the cost of equity until the FCC revises the ICLS mechanism to incorporate the appropriate separations changes and the appropriate revenue offset because until that occurs it is very hard to estimate the current risk associated with equity returns for rate-of-return carriers. Once the appropriate changes have been made then the cost of equity could be reduced such that the total WACC could approach 8 or 9 percent.

4. The Impact of a Change of the Rate-of-Return on ICLS and HCL Support

As noted above, a reduction of the rate-of-return to 8 or 9 percent reduces ICLS b

As noted above, a reduction of the rate-of-return to 8 or 9 percent reduces ICLS by approximately 3.5 and 5 percent if all other things are being held constant. However, all other things are not constant. Given our current estimates and with reasonable changes in separations rules, Consumer Advocates have explained above that the reduction in the rate-of-return will have a minimal impact on support for rate-of-return carriers.

A reduction of the rate-of-return to 8 or 9 percent reduces the high-cost loop ("HCL") revenue requirement by approximately 4 to 6 percent. However, because HCL support is

¹⁰⁵ Rates vary by speed and whether the customer is a new or existing customer. See for example, http://www.centurylink.com/home/internet/.

¹⁰⁶Source of the line count estimate: http://www.usac.org/about/governance/fcc-filings/2012/quarter-1.aspx, Table HC09 ICLS by state by SAC 1Q12.

¹⁰⁷ Consumer Advocates estimate based on data contained in the NECA Universal Service Filing, September 30, 2011, transition.fcc.gov/wcb/iatd/neca.html.

based on the difference between the national average cost per loop and the study area cost per loop and the cap on the HCL fund, reducing the rate-of-return has minimal impacts on HCL support. Among carriers, there will be a slight decrease in support for relatively capital-intensive carriers, and a slight increase in support for relatively expense-intensive carriers, with the total support remaining constant.

D. ELIMINATING SUPPORT FOR AREAS WITH AN UNSUBSIDIZED RIVAL

The FCC seeks comment on certain aspects of its plan to eliminate support to incumbent rate-of-return carriers for those areas with an unsubsidized rival. ¹⁰⁸ In the Order, the FCC phases out all high-cost support received by rate-of-return ILECs over a three-year period in areas where an unsubsidized competitor, or a combination of unsubsidized competitors, offering voice and broadband service that meets the FCC's performance obligations, serves 100 percent of the residential and business locations in the incumbent's study area. ¹⁰⁹ The FCC now seeks comment on "a proposed methodology for determining the extent of overlap, a process for preliminary determinations of such overlap, a process for the affected ETC to challenge the accuracy of the purported overlap, with input from the relevant state commission and the public, and how to adjust support levels in situations with less than 100 percent overlap." ¹¹⁰

Consumer Advocates welcome the FCC's elimination of support for areas with an unsubsidized competitor or a combination of unsubsidized competitors. This reform is long overdue – USF funds are limited and the need for support elsewhere is great. When the Commission has access to reasonably accurate information on the overlap of service providers

¹⁰⁸ Notice, at paras. 1061-1078.

¹⁰⁹ Order, at paras. 280-284.

¹¹⁰ Notice, at para. 1061.

that offer both voice and broadband services that are consistent with the Commission's objectives, the FCC should expedite its process for eliminating the inefficient use of consumer-funded support relative to the time frame set forth in the Order. The elimination should occur over a one-year, or at most, a two-year period of time rather than the three years set forth in the Order.

There are two separate elements of this reform. First, the FCC intends to eliminate support entirely in areas with 100% overlap with one or more unsubsidized competitor.

Consumer Advocates recommend that the FCC interpret its 100% benchmark as corresponding with levels within 1 percentage point of 100% overlap. In other words, if the data show 99% or more overlap within a study area, the FCC should determine that its 100% threshold has been met and should eliminate support within that study area. Establishing this leeway of relying on a range of overlap between 99% and 100% is reasonable because it is virtually impossible to obtain perfectly precise data about competitors' presence. ¹¹¹ All consumers bear the cost of support, and, therefore, expecting an implausible level of perfection in data would unduly and unfairly burden the entire universe of customers.

Second, the FCC proposes rules that would adjust (but not eliminate) support levels in areas with less than 100 percent overlap. Consumer Advocates support rules that would ratchet down support in study areas as the percentage of overlap with a non-subsidized competitor increases. ¹¹²

The data presented in Figure 12 of the Notice (which summarizes Staff's analysis of areas of overlap)¹¹³ illustrates the validity of both elements of reform. The analysis shows that

¹¹¹ See, e.g., *id.*, at paras. 1066 and 1067, discussing the limitations of the Tele Atlas and SBI data.

¹¹² *Id.*, at paras. 1061, 1073.

¹¹³ *Id.*, at para. 1065.

presently approximately \$132 million in annual support is provided to 88 study areas with 638,658 lines where there is at least 80% overlap between the incumbent carrier and an unsubsidized competitor. More granularly, the data show that in areas with at least 99% overlap (i.e., close to but not exactly 100% overlap), \$17 million is spent in support although all but at most, one percent of consumers have the option to obtain service from an unsubsidized competitor. That one percent of consumers corresponds with 550 consumers, that is, one percent of the 54,952 consumers in the first study area shown in the table below. The other approximate 54,400 households are in areas with an unsubsidized rival. Dividing the annual support of \$17 million by those 550 consumers yields a support level of approximately \$31,000 per consumer residing in a "non-overlap" area. By contrast, Table 1 below, which is based on Figure 12 from the Order, shows that for the next category (between 95% and 99% overlap), the per-consumer support (based on an estimate of the number of consumers who reside in the non-overlap area) is \$4,652, which is substantially less than the above-99%-overlap grouping. This sharp distinction illustrates the drawback of relying on a precise 100% overlap in implementing the first element of reform (the elimination of support where there is 100% overlap).

Table 1¹¹⁴

	Lines supported	Percent Overlap	Estimate of lines in non-overlap area (low end used)	Annual support		Estimate of annual support per line in non-overlap area	
	54,952	>/ 99%	550	\$	17,000,000	\$	30,936
	71,794	At least 95%, < 99%	3,590	\$	16,700,000	\$	4,652
	511,912	At least 80%, <95%	102,382	\$	98,500,000	\$	962
Total	638,658		106,522	\$	132,200,000	\$	1,241

Source: Notice, para. 1065, Figure 12

The Staff's analysis also supports tapering off assistance in areas as overlap increases. Consumer Advocates recognize that the FCC has established a limit of \$250 per-line per month for universal service support (that is, \$3,000 per year), 115 but that level is calculated based on *all* the lines in a carrier's study area. Table 1 above estimates support solely for those consumers in "non-overlap" areas. The FCC seeks comment on a mechanism for adjusting support in areas with less than 100 percent overlap. 116 The FCC could also consider limiting support to a specific maximum annual amount, such as \$3,000 per customer residing in the *non-overlap* portion of the relevant study area. 117 Adopting such a mechanism would mitigate the problem that otherwise would exist if the FCC were simply to wait until there is 100% overlap with a supported carrier before reducing support. Tapering off assistance would be fair and efficient, and the Commission should reexamine the 80% threshold as data from the cost model becomes available.

¹¹⁴ Analysis uses 1% for the first category, which overestimates the lines that are in non-overlap areas because Figure 12 shows *greater than or equal to* 99% overlap for this category. Similarly, the analysis is based on the low ends of the two other categories (i.e., 95% and 80%), which also results in an overestimate of the lines that are in non-overlap areas.

¹¹⁵ Order, at paras. 274-275.

¹¹⁶ Notice, at paras. 1061, 1073.

¹¹⁷ The level of \$3,000 corresponds with the cap established by the FCC in its Notice, at paras. 274-275.

The FCC also refers to two data sets that its staff has used for preliminary analysis:

TeleAtlas Wire Center Boundaries (6/2010) and data from the State Broadband Initiative ("SBI") program administered by NTIA as of December, 2010, 118 and cites to its National Broadband Map. 119 The FCC should rely only on data that is public and should not rely on any third-party or proprietary data for which stakeholders (e.g., consumer advocates and state regulators) would need to pay a fee or for which they would be denied access. Public agencies have limited resources and should not be expected to purchase databases. Universal service funds rely on consumer contributions, and, therefore, any use thereof should be based on transparent and readily available information to ensure accountability and efficient use of public monies.

Moreover, states should have the option to substitute geographic databases that they have created with their own resources and information, where so doing would yield more accurate and up-to-date information than the FCC's broadband map.¹²⁰ With the assistance of state-funded mapping efforts (e.g., through state agencies that manage Geographic Information Systems), states may have undertaken more accurate and comprehensive mapping of broadband deployment than the maps that either TeleAtlas or SBI have generated. Indeed, it is far preferable from a public policy perspective, for states to possess, control, and update maps of broadband deployment within their boundaries than for the FCC to rely on third party databases.

The FCC indicates that it intends to publish a finalized methodology for determining areas of overlap and also to publish a list of companies for which there is a 100 percent overlap. Consumer Advocates urge the FCC to publish a list of companies for which there is

¹¹⁸ *Id.*, at para. 1062.

¹¹⁹ *Id.*, at note 2194.

¹²⁰ See *id.* at para. 1072, seeking comment on the role of state commissions in determining areas of overlap.

¹²¹ *Id.*, at para. 1070. The FCC also intends to publish a list with great than 75 percent overlap. Notice, at para. 1071.

an 80%, 90%, 95%, 99% and 100% overlap, to correspond with the ratcheting mechanism discussed above. Furthermore, the FCC should update these lists at least once per year.

The FCC also seeks comment on other issues, including the possible use of the cost model to be developed by the Wireline Competition Bureau to "create a presumptive reduction in support levels for rate-of-return carriers" and for the allocation of costs between non-competitive and competitive areas. Consumer Advocates support mechanisms that would limit support to only those lines that are in the non-overlap areas, with providers being required to bear the burden to demonstrate the level of support needed. Providers could rely in part on the cost model results and on information about their costs and earnings.

E. LIMITS ON REIMBURSABLE CAPITAL AND OPERATING COSTS FOR RATE-OF-RETURN CARRIERS

1. Introduction and Recommended Process for Adopting Limits on Reimbursable Capital and Operating Costs

The Order states that the FCC's "obligation to consumers is to ensure that they receive supported services. Our expectation is that carriers will provide such services to their customers through prudent facility investment and maintenance." Consumer Advocates wholeheartedly agree with the FCC's statement of its obligations and its expectations of carrier actions to fulfill those obligations.

To ensure that prudent investment and maintenance occurs, the FCC proposes to establish benchmarks that would limit the amount of investment and expenses that could be recoverable

¹²² *Id.*, at para. 1076.

¹²³ The FCC refers to "non-competitive areas." *Id.*, at para. 1076. Consumer Advocates however disagree with the implication that the presence of one other provider in an area (i.e., the "overlap" area) would render an area "competitive." Accordingly, Consumer Advocates refer to "overlap" and "non-overlap" areas.

¹²⁴ *Id.*. at paras. 1076-1077.

¹²⁵ *Id*.

¹²⁶ Order, at para. 222.

through its universal service mechanisms. The benchmarks will be calculated using regression techniques. The Commission also finds that the results of the regression techniques should be implemented no later than July 1, 2012. 127

While it would be preferable to specifically analyze each carrier's investment and expenditures, Consumer Advocates recognize that the FCC does not have sufficient staff resources to perform the detailed carrier specific work. Therefore, Consumer Advocates support an approach based on statistical regression techniques.

In the Notice, the FCC requests comment on the general methodology, on whether it should use a 85 or 95 percent quantile rather than the 90 percent quantile, and on whether the same general methodology should be applied to Interstate Common Line Support. In addition, the FCC requests comment on two alternative proposals. First, the FCC requests comment on whether it should use one total cost equation rather than the multiple equation process suggested in the Order. Second, the FCC requests comment on whether the reduction associated with the benchmarks should be applied to a carrier's interstate revenue requirement.

While Consumer Advocates will comment below on the FCC's individual questions,
Consumer Advocates first wish to suggest a reasonable approach toward advancing the FCC's
goal of establishing reasonable benchmarks. Consumer Advocates recommend that a reasonable
approach would be to conduct an extended series of comments and reply comments related to the
regression estimation process. These comments would be responding to additional technical
public notices. The first technical public notice would provide a list of alternative input variables
and alternative regression equations. It would also provide the entire set of statistical results
associated with the equations in Appendix H to the Order and the new regressions, such as, but

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¹²⁷ *Id.*, at para. 216.

not limited to, the F-test results, or homogeneity test statistics. The comments would focus on what the parties recommend regarding the input variables or regression equations. The FCC would then generate a database with the new variables and perform the suggested regressions. The database and the regression results would be released as appendices to a second public notice. It is necessary for the FCC staff to generate the database and perform regression work, because the database must be consistent across all carriers and because many parties do not have access to the data or cannot afford to pay for access to commercially available data. Parties would then be able to comment on the second public notice. After all parties have had an opportunity to review and comment on the expanded analysis, the Bureau can use its delegated authority to choose a preferred technique. In addition, Consumer Advocates recommend that the implementation date be moved to January 1, 2013 to allow for this recommended process to be completed.

2. Analysis of the Proposed Methodology

The proposed methodology requires substantial modification and verification before it can be used to determine limits on reimbursable capital and operating expenses. As discussed below, the FCC's proposed methodology suffers from specification error; dependence on data sets that are not publicly available and may not be accurate, lack of verification of the regression equations; very low explanations of the variance of the dependent variable; unintended consequences that may provide incentives for carriers to game the system or to choose to invest in an uneconomical set of facilities; and an inappropriate method for applying the results of the regression analysis.

3. Specification Error and Input Variables

A specification error occurs when the regression equation(s) omit variables that should be included or include variables that should be omitted. The first instance of an omitted variable

here is the failure to include a terrain or soil variable. The FCC's Synthesis model and other engineering models include alternative construction costs by type of soil. The Nebraska study supports the use of soil or terrain variables. ¹²⁸ The Order and Appendix H suggest that the reason for omitting such a variable is a lack of completeness due to the fact that the Soil Survey Geographic database does not cover 24 percent of the United States land mass. ¹²⁹ This explanation cannot be accepted, for the following reasons. A) The 24 percent number exaggerates the impact of the lack of completeness because much of that land mass is the unpopulated area of Alaska. B) Alaska, due to high construction costs associated with weather, could be considered an outlier with respect to the soil variable. C) Guam and American Samoa are also probably outliers due to the high cost of transporting equipment and supplies to those islands. ¹³⁰ D) Puerto Rico, Virgin Islands and Northern Mariana Islands are not in the regression due to the fact that those territories are served by price cap carriers. Therefore, a soil or terrain variable should be included among the independent variables in the regression.

Second, the preferred regression equations omit the density variable. A density variable is a very important indicator of cost. All engineering models generate a hockey-stick type of cost curve, where costs are relatively flat at high densities but at an inflection point increase sharply to become almost vertical at very low densities. The Windstream regression that is used in the CAF price cap carrier Phase I process contains a density variable, the log of locations

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¹²⁸ Letter from Thomas Moorman, Counsel to Nebraska Rural Independent Companies to Marlene H. Dortch, Secretary, FCC, WC Docket Nos. 10-90, 05,0337, GN Docket No. 09-51, Attach. (Nebraska Rural Independent Companies' Capital Expenditure Study: Predicting the Cost of Fiber to the Premise) (dated January 7, 2011).

¹²⁹ Order, footnote 349 and Appendix H, footnote 33.

¹³⁰ Moreover, for some reason, most likely a lack of data, Guam and American Samoa are not included in the data base used to generate the regression equations.

divided by area. 131 Moreover, most cable franchise contracts allow the cable company to cease building if the number of households per road mile drops below a threshold level of households. 132 Therefore, instead of omitting the density variable, the FCC should develop alternative density variables such as households or locations per road mile, the number of census blocks in urban areas divided by the number of census blocks in rural areas, or the area in census blocks in urban areas divided by the area in census blocks in rural areas. Instead of developing these additional density variables, the Order suggests that the number of census blocks could be used as a proxy for density. However, the number of census blocks can increase with land area without causing any increase in service territory density. Thus, the Appendix H regressions in Table One contain four measures of scale (loops, housing units, land area and census blocks) and no measures of density. The results are significant multi-collinearity and unacceptably low explanations of the variance in the dependent variable. Therefore, Consumer Advocates recommend that the FCC collect all of the independent variables suggested by parties in these comments, reply comments or ex parte filings and generate a national database that contain data for the suggested variables for all carriers. 133

4. Assignment of Census Data to Study Areas Based on Tele Atlas Maps

The FCC assigned Census data to carrier study areas using Tele Atlas data. In particular, it designated a Census block as being within a service territory if the centroid of that block was

¹³¹ Letter from Jennie Chandra, Windstream to Marlene H. Dortch, FCC, In the matter of the Connect America Fund, WC Docket No. 10-90, June 30, 2011.

¹³² Direct Testimony of Dr. Robert Loube on behalf of the Maine Office of Public Advocate, CRC Communications of Maine, Inc., Investigation Pursuant to 47 U.S.C. § 251(f) (1) Regarding CRC Communications of Maine's Request of Unitel Inc., Maine PUC Docket No. 2009-40, February 19, 2010.

¹³³ The database is also missing data for three Nebraska carriers and one Michigan carrier. When the FCC staff performs the suggested tasks of improving the correspondence between the independent variables and the service territories, Consumer Advocates also recommend that the FCC staff include the missing carriers in the data collection process.

located within the service territory of the carrier.¹³⁴ Because of limitations on budget and the availability of data, Consumer Advocates tested the use of Tele Atlas data by comparing that data to information available on the Maine GIS web site for four rate-of-return cost carriers: Lincolnville, Oxford West, Mid-Maine and Union River.¹³⁵ Table 2 below compares the total number of census blocks in the FCC data to the Census Block we were able to determine using the Maine GIS map.

Table 2

Carrier	Maine Map Total	FCC Tele Atlas Map	Difference
	Census Blocks	Total Census Blocks	
Oxford West	913	1188	23.1%
Lincolnville Networks	1372	1266	8.4%
Union River	1304	1491	12.5%
Mid-Maine	807	710	13.7%

The substantial differences in the total census block count for three of the four carriers examined would cause an impartial observer to be skeptical regarding the outcome of the regression analysis because the independent variables are not related to the investments and operating expenses of the carriers. A solution to this problem would be for the FCC staff to generate a map for each carrier showing the Census Blocks assigned to that carrier and the carrier's service territory as designated by TeleAtlas. These maps would be provided in both PDF and ARCreader format to the carrier. These maps would also be compared to the Census Blocks assigned to the carrier in the NTIA broadband mapping project maps. The carrier would be allowed to file exceptions to these maps. The state commissions should review this process and compare the new maps to information in their possession. After the carrier, state commission and the FCC staff agree on the proper set of Census Blocks that are located in the carrier's

¹³⁴ Appendix H, footnote 36.

¹³⁵ http://www.maine.gov/megis/catalog/.

service territory, the FCC staff would reconstruct its independent variable database and recalculate its regression equations.

5. The Use of the Equations to Predict the Relationship between Input Variables and Investment and Operating Expenses

The proposed regression equations are associated with R-squares that are very low. The R-square is a measure of the variation of the dependent variable that is explained by the regression equation. The reported R-squares, that Appendix H finds reasonable, vary from a high of 0.5863 to a low of 0.2745 and average at approximately 0.41. This implies that the FCC is willing to rely on equations that explain only 40 percent of the variation in the dependent variable and leave 60 percent of the variation unexplained. It is very hard to believe that such equations are good predictors of future expenses or investments. That is, Appendix H defends the equations because it states that "our goal is prediction." While Consumer Advocates agree that it is possible to accept equations where the independent variables are not significant if the goal is prediction, it is necessary that the equation be a **good** predictor. For example, in contrast to Appendix H, the equation proposed for use in the Phase I CAF for price cap carriers exhibits a R-square of 0.91. 137 While Consumer Advocates are not endorsing the Phase I regression at this time, that equation at least explains a high enough percentage of the variation in the dependent variable that the equation can be considered for adoption. Because the Appendix H regressions exhibit such low R-squares, Consumer Advocates recommend that the FCC reject the proposed equations in Appendix H.

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¹³⁶ Appendix H, at 14.

¹³⁷ Letter from Jennie Chandra, Windstream to Marlene H. Dortch, FCC, In the matter of the Connect America Fund, WC Docket No. 10-90, June 30, 2011, and Order, at para. 134.

6. *Unintended Consequences and the Number of Equations*

Unintended consequences refers to the problem that a reasonable set of regulations that are designed to provide incentives that would to lead reasonable outcomes can have consequences that were not considered at the time of adoption, and that those consequences can lead to outcomes that were not the intent of the agency that established the regulations. For example, price cap regulation was designed to provide a profit incentive to carriers so that the carriers would eliminate inefficiencies and produce services in a manner similar to competitive firms. However, price cap regulation has in fact led to a substantial decline in investment and, with that decline in investment, many areas served by price cap carriers do not have broadband service.

In this instance, the intended consequence of the regression equations is the removal of unwarranted costs that should not be supported by the federal universal service funding mechanism. However, the unintended consequences included large payments to accountants to develop techniques that allow carriers to avoid the constraints and the incentive to adopt an uneconomical set of inputs.

Avoidance of constraints can be accomplished through re-assigning costs from an account that exceeds a constraint to an account that is below a constraint. For example, a corporate officer can become the head of outside wire maintenance or outside wire maintenance expenditures can become part of network operations. Given the limited resources of FCC staff, it would be almost impossible to prevent such accountant-directed cost shifting from occurring. For this reason, it is better to estimate one expense equation rather than eight separate expense equations (the seven equations in Appendix H and the revised corporate operations equation).

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¹³⁸ The net investment of ATT ILECs declined from \$58.8 billion in 1996 to \$25.0 billion in 2007, the net investment of Verizon ILECs declined from \$46.7 billion in 1996 to \$23.7 billion in 2007 and the net investment of Qwest ILECs declined from \$14.8 billion in 1996 to \$8.6 billion in 2007. Source: ARMIS 43-01 Reports.

Moreover, the expense equation should not include depreciation, algorithm steps 17 and 18. Instead, depreciation expenses can be controlled through the constraint on investment and the adoption of reasonable depreciation service lives.

With regard to an uneconomical set of inputs, under the constraint regime, the carrier has an incentive to choose those inputs that allow it to remain under all of the caps, even though a different set of inputs would lead to a lower total cost of service, because when the carrier adopts the lower total cost of service inputs it may exceed the cap related to just one of the inputs. An example of this type of behavior is related to the choice of replacing copper cable with fiber cable. It has long been known that maintenance expenses related to copper cable are higher than the maintenance expenses related to fiber cable. ¹³⁹ In addition the Commission has recently recognized that "[o]ver the lifetime of a network, the cost of a fiber-to-the-premises (FTTP) and short-loop (12,000-foot) DSL network may be basically equal, meaning that green-field costs are equivalent to those for a FTTP deployment." ¹⁴⁰ Therefore, it is likely that the replacement of copper cable with fiber cable could reduce the total cost of service. However, if the carrier decides to replace copper plant with fiber plant, there is a chance that the carrier would exceed the investment caps related to cable. Exceeding that cap would reduce the carrier's universal service funding and therefore, provide a negative incentive to make the investment. Thus, the imposition of the cap, in this instance, leads to higher total costs and the retention of plant that is inferior in the provision of broadband service.

¹³⁹ With regard to the forward-looking Synthesis model, the Commission found that expense to investment ratio for copper cable was 0.0669, while the expense to investment ratio for fiber cable was 0.0073. *In the Matter of the Federal-State Joint Board on Universal Service*, CC Docket No. 96-45, Tenth Report and Order, FCC 99-304, released November 2, 1999, Appendix A.

¹⁴⁰ Order, at para. 181.

Another example of the incentive to purchase an uneconomical set of inputs is associated with the decision to purchase switches. As the Commission noted, the price of softswitches is lower than the price of circuit switches, and it may be possible for multiple carriers to share softswitches or for one carrier with multiple exchanges to replace multiple circuit switches with one softswitch. When a carrier replaces multiple circuit switches with one softswitch, its local exchange switching category 3 investment is reduced. However, its circuit equipment category 4.13 increases because the other circuit switches will be replaced by some type of terminating equipment. Cable investment will be re-assigned from Category 2 exchange trunk or Category 3 interexchange trunk to Category 1 feeder facilities. Thus, while the carrier's total cost of service decreases, its high cost loop investment will increase substantially and the new investment could easily be above capped amounts. Again the cost saving investment is associated with the reduction in universal service funding and thus, the capping investments leads to the uneconomical choice of inputs and a higher total cost.

To avoid the issue of adopting an uneconomical set of inputs, the Commission could estimate only one equation, a total cost equation. Consumer Advocates recommend that the Commission should investigate the option of using one total cost equation rather than the eleven separate equations. However, the total cost equation is relevant only for the example of the choice between copper and fiber plant. In the other example, the choice between cable and switching, the total cost equation is not the solution to the problem because switching costs are not part of the high cost loop algorithm. To solve that problem the Commission must provide incentives for rural carriers to continue to replace circuit switches with softswitches.

¹⁴¹ *Id.*, at para. 902.

7. Picking the Correct Quantile

A quantile is a general term for percentiles. If a population is divided into four parts, the parts are described as quartiles. If it is divided into five parts, the parts are described as quintiles, and into ten parts, deciles. Appendix H adopts the quantile method of regression estimation to determine whether a carrier's investments or operating expenses are unusual and should be limited. The quantile regression techniques minimizes the sum of the absolute residuals. If this sum is unweighted, the regression focuses on the median. If the sum is weighted, the regression can focus on any percentile the analyst wishes to determine.

The regression shown in Appendix H chooses the 90th percentile.¹⁴³ This establishes the rule that carriers with investments or operating expenses above the 90th percentile are spending too much and for the purposes of determining universal service support, those carriers' investments or operating expenses are capped at the 90th percentile.

The Notice asks the question whether the 90th percentile is the correct percentile or should the FCC adopt either an 85th or 95th percentile.¹⁴⁴ The correct percentile for this purpose should be a percentile that defines an event that significantly different from the normal.

Generally, and as the FCC has applied in forward-looking model universal service mechanism, an event is considered significantly different from the normal if it is greater than two standard deviations away from the mean.¹⁴⁵ This two standard deviations test, if the distribution is normal, is associated with approximately 95 percent of the distribution. Therefore Consumer Advocates recommend that the FCC adopt the 95th percentile rather than the 90th percentile.

¹⁴² Roger Koenker and Kevin Hallock, "Quantile Regression," *Journal of Economic Perspectives*, Volume 15, number 4, 143-156.

¹⁴³ Appendix H, at 4.

¹⁴⁴ Notice, at para, 1080.

¹⁴⁵ *In the Matter of High-Cost Universal Service Support*, WC Docket No. 05-337, Order on Remand and Memorandum Opinion and Order, FCC 10-56, released April 16, 2010, at para. 41.

The mathematical form of the FCC's proposed regression is a log-log regression. That is, with a few exceptions, the values of the dependent variables and independent variables were transformed into their natural log equivalents. The regression equation then becomes the sum of the natural log equivalents. This transformation means that the analyst is assuming that the underlying structural relationship between the independent and dependent variables is non-linear. The non-linear relationship is transformed into a linear relationship through the use of the natural log equivalents. However, Appendix H does not offer any rationale or statistical evidence that supports the assumption that the underlying relationship between the independent and dependent variables is non-linear. Moreover, there is no discussion of the impact of the assumption on a carrier's probability of being affected by the caps. At this time, Consumer Advocates have not completed an analysis of this issue. However, in keeping with Consumer Advocates' general recommendation that the process of adopting the regression equation(s) contain at least two more comment cycles, Consumer Advocates recommend that the issue of the mathematical form be

The Specification of the Model: The Mathematical Form of the Regression

9. Implementation of the Results of the Regression Equations in the HCL Mechanism
The implementation issue addresses how the high cost loop mechanism determines
support after the regression equation(s) have capped the investment and operating expenses of a
group of carriers. The Order suggests that the high cost support for capped carriers will be
limited and the support not provided to capped carriers will be distributed to uncapped
carriers. With regard to average schedule companies, the Order directs the National Exchange
Carrier Association ("NECA") "to modify the high-cost support universal service formula for

discussed during those comment cycles.

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¹⁴⁶ Appendix H, at 13.

¹⁴⁷ Order, at para. 220.

average schedule companies annually to reflect the caps derived from the cost company data."¹⁴⁸ Because there will always be some cost companies that are capped in NECA's sample of cost companies that are used to determine average schedule formulas, this directive ensures that every average schedule carrier will be a capped carrier.

In the FCC's first attempt to implement these guidelines, based on NECA's 2010 data submission and the Appendix H regression equations, the FCC estimated that "the proposed methodology would reduce HCLS payments to about 280 rural rate-of-return cost study areas by an estimated \$110 million, with approximately \$55 million redistributed to approximately 340 cost company study areas whose unseparated loop cost is not limited by operation of the benchmark methodology." ¹⁴⁹

This implementation result, however, does not redistribute the funds back through the HCL mechanism. Instead, it is a negative-sum game that reduces the support for rate-of-return carriers by approximately \$55 million. In the past, reforms, such as the corporate expenses limitation, were implemented as a zero-sum game. That is, the entire savings were returned to the carriers participating in the high cost loop mechanism.

The process that determines HCL support and allows for the zero-sum game implementation is well-known to the industry and interested regulators. Each year NECA uses the carriers' filings to determine each carriers study area cost per line ("SACPL") according to a 26-step algorithm. Next it determines the fund cap according to the FCC's rules. Then it determines the national average cost per loop ("NACPL") that will distribute the fund capped support across all of the carriers. ¹⁵⁰ In implementing the Order's corporate operations expense

¹⁴⁹ Notice, at para. 1084.

¹⁴⁸ *Id*, at para. 218.

¹⁵⁰ The Excel "goal seek" application can be applied to determine the NACPL.

limitation, the only change in the sequence is that SACPL are determined using the expense limitation. After the limitation is in place, the capped fund support is allocated among the carriers based on the revised SACPL. The result is a different NACPL and a different support level for each carrier. It is possible under the current rules for a carrier that is limited by the corporation operation expense rule to actually receive more support than it would have prior to the implementation of the limitation. This seemingly inconsistent result revolves around the relationship between the impact of the limitation on the individual carrier and the change in the NACPL. If the impact of the limitation on the carrier is relatively small compared to the change in the NACPL, then the carrier can receive more support after the limitation than before the limitation was imposed.

Under the methodology presented in the Order, a carrier that is capped by any of the 11 equations is disqualified from receiving any additional support. Thus, if the equations impose any marginal limitation on the carrier's SACPL, that carrier's support decreases. This result is different from what occurs under the current interpretation of the rules. Currently if the limitation is minor for an individual carrier, and there is a large change in the NACPL, the carrier can receive additional support. It is this type of additional support that ensures that the HCL mechanism is a zero-sum game.

While Consumer Advocates do not at this time have a position on whether the HCL mechanism should be a zero-sum or a negative-sum game, Consumer Advocates do strongly recommend that the FCC immediately release all work papers that it used to determine the results shown in paragraph 1084 of the Order so that all parties can understand how the FCC generated those estimates. Second, if the FCC adopts the negative-sum game methodology, then

it is imperative for the FCC to explain how the rate-of-return carriers will receive the entire \$2 billion that the budget allocates to these carriers.

F. ETC SERVICE OBLIGATIONS

The FCC seeks comment on "what Commission action may be appropriate to adjust ETCs' existing service obligations as funding shifts to these new, more targeted mechanisms." ¹⁵¹

Under no circumstance should reduced support be accompanied by a relaxation of voice service obligations. ¹⁵² As NASUCA stated last year:

The idea that obligations to serve are eliminated for carriers that do not receive support means that for each carrier it will be an individual economic (business-case) decision whether to accept support or to escape the obligations. And that decision will be enabled on a market-by-market basis, by some of the largest corporations in the Nation. ¹⁵³

ETC obligations are important to protect consumers and include consumer protection and service quality standards as well as requirements regarding the provision of service during emergencies. States have been at the forefront of enforcing these obligations. There is no justification for tying the CAF to preemption of state authority or to elimination of public interest obligations such as carrier of last resort obligations.

Consumer Advocates commend the FCC's decision in the Order to reject calls to preempt state-mandated voice service obligations. The FCC must protect its goal of universal voice

¹⁵¹ Notice, at para. 1089.

¹⁵² *Id.*, at para. 1095.

¹⁵³ Initial Comments of The National Association of Statue Utility Consumer Advocate on Further Inquiry into Certain Issues in the Universal Service – Intercarrier Compensation Transformation Proceeding, WC Docket No 10-90 et al., August 24, 2011, at 26.

¹⁵⁴ Order, at para. 82. The FCC finds that the supporters of preemption had failed to show that any specific obligations were unfunded mandates that would harm broadband deployment and to show that the obligations were inconsistent with federal rules. *Id.*

service (and ensure that is remains reliable and affordable) even as it pursues broadband deployment. 155

The FCC proposes, in the near term, a case-by-case *federal* forbearance process for ETC relinquishment and service area redefinition. This process would be inadequate because it fails to properly balance federal and state roles. And it presumes that there are cases where such forbearance might be appropriate – which it is not.

Finally, with respect to ETC obligations, the FCC asks how "how to ensure that low-income consumers across America continue to have access to Lifeline service, both in urbanized areas that will not, going forward, receive support from the new CAF, and in rural areas that will, over time, receive support from the CAF." Again, this presumes that changes in support should dictate these public interest obligations. Proposals to eliminate service obligations for telecommunications carriers are directly contrary to the FCC's stated goal, and it is not evident how the FCC can ensure access to Lifeline service if it uses the forbearance process, for example. Clearly, Congressional objectives related to universal service are thwarted in a case where an ETC is relieved of its Lifeline obligation when there is no other ETC operating in the area to provide those services. ¹⁵⁹

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¹⁵⁵ See Letter from Regina Costa, NASUCA, to Marlene H. Dortch, Secretary, FCC, WC Docket No. 10-90, et al. October 3, 2011.

¹⁵⁶ Notice, at para. 1097.

¹⁵⁷ *Id.*, at para. 1100.

¹⁵⁸ *Id.*, at para. 1102.

¹⁵⁹ See, *id.*, at para. 1102, wherein the FCC asks, "As a matter of federal policy, would it thwart achievement of the objectives established by Congress to relieve an existing ETC of the obligation to provide Lifeline if there was no other ETC in that particular area willing to offer Lifeline services?"

G. ENSURING ACCOUNTABILITY

In Section VI of its Order, the FCC sets forth public interest obligations associated with ETCs receiving USF funding. In the Notice, the FCC seeks comment on various approaches to ensuring accountability by ETCs with respect to these diverse public interest obligations. Consumer Advocates fully support the FCC's implementation of measures to ensure accountability. Although the proposed CAF is capped, all consumers, regardless of whether they reside in states that are net recipients of support or net contributors to the CAF, have a stake in making sure that USF monies are spent prudently. Consumers are footing the bill for the subsidies through the universal service surcharge, and therefore should be protected by FCC-established measures to "protect the integrity of the USF funds." 162

In this section of the Notice, the FCC seeks comment on financial performance guarantees for ETCs that receive funding through processes other than competitive bidding ¹⁶³ and on triggers for determining non-compliance with public interest obligations. ¹⁶⁴ Among the possible remedies that the FCC identifies as possible remedies for non-compliance with the FCC's rules are financial guarantees and penalties. ¹⁶⁵

Although Consumer Advocates welcome diversity in the supply of broadband services, ultimately, the overriding goal of the FCC's rules regarding accountability should be to filter out those carriers with financial situations that are so precarious as to jeopardize the integrity of the funds and to have effective, administratively practical means by which the FCC can recover

¹⁶⁰ Order, at paras. 74-114.

¹⁶¹ Notice, at paras. 1103-1116.

¹⁶² *Id.*, at para. 1105.

¹⁶³ *Id.*, at para. 1106.

¹⁶⁴ *Id.*, at paras. 1111-1116.

¹⁶⁵ *Id.*, at paras. 1105-1110.

funds from carriers that fail to comply with the FCC's public interest obligations. In other words, it is more important that the FCC establish strong safeguards against inefficient use of the CAF than it is for the FCC to maximize the potential number of carriers that participate in the program. Consumer Advocates do not, however, oppose a provision allowing recipients a period of time to cure non-performance with required deployment milestones, public interest obligations, and other requirements associated with receiving USF subsidies. ¹⁶⁶

The FCC seeks comment on whether, as an alternative to financial guarantees, FCC establishment of penalties such as revocation of ETC designation, denial of certification, or recovery of past support amounts would be appropriate. Consumer Advocates recommend that, if the FCC takes this approach, it adopt the remedy that would be the most straightforward for the FCC to implement in the event of non-compliance and also that would be most likely to deter participation by carriers with precarious financial situations. Consumer Advocates do not take a position at this time on the preferred remedy for non-compliance.

The FCC seeks comment on the triggers that the FCC should use to impose remedies for failure to meet FCC requirements.¹⁶⁸ It will be challenging for the FCC to establish triggers that can be implemented with minimal administrative burden, i.e., that can enable the FCC to determine unambiguously when ETCs have failed to meet the diverse public interest obligations that the FCC has set forth. Among the obligations for ETCs are requirements to offer voice service (including as a standalone service)¹⁶⁹ at rates that are reasonably comparable to urban

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¹⁶⁶ *Id.*, at para. 1109.

¹⁶⁷ *Id.*, at para. 1110.

¹⁶⁸ *Id.*, at paras. 1111-1116.

¹⁶⁹ Consumer Advocates observe that a mere requirement to offer standalone voice service without the reasonable comparability criterion (Order, at para. 80) is insufficient to protect consumers because carriers could offer such service at a prohibitive price.

areas and in compliance with state voice service requirements;¹⁷⁰ and to offer broadband service that meets certain basic performance requirements, report regularly on broadband performance measures, offer broadband service in urban areas that are reasonably comparable to that offered in urban areas¹⁷¹ and meet broadband build-out obligations.¹⁷²

Consumer Advocates do not address at this time the FCC's specific questions such as whether there should be a sliding scale for recovery of past amounts depending on the degree to which carriers fail to meet specific milestones, whether the FCC should adopt rules that create self-executing reductions in support, and the merits of establishing set percentages of support that an ETC would lose based on its non-compliance with each public interest obligation that the FCC sets forth in Section VI of its Order. Consumer Advocates may address these issues in reply comments. Consumer Advocates observe, however, that given the complexity of assessing compliance with the wide-ranging public interest requirements, the administrative burden of assessing compliance will be substantial. This complexity, of course, does not in any sense justify relaxing regulatory oversight of ETCs' compliance, but simply underscores the importance of having a clearly defined approach at the outset. Furthermore, Consumer Advocates recommend that all data, information, and communication regarding ETCs' compliance with the FCC's public interest obligations be public and also be provided to state public utility commissions. Because ETCs are benefiting from public monies, they should be

¹⁷⁰ Order, at paras. 79-82.

¹⁷¹ *Id.*, at para. 86. The FCC, inexplicably, does not require ETCs to offer standalone broadband service but rather "expect[s]" that if they offer standalone broadband service in their nonsubsidized areas they will also offer such service in their CAF-supported areas. *Id.*, at footnote 127.

¹⁷² *Id.*, at para. 103. The specific obligations vary among the different CAF mechanisms. *Id.* See *id.*, at para. 105, Figure 1 for a summary of the broadband build-out obligations and performance characteristics for these four categories of USF support: Price Cap CAF (Phase I); CAF in Price Cap Areas (Phase II); Areas with no terrestrial backhaul; and Mobility Fund, Phase I.

fully and openly accountable not only to the FCC but to the general public. Maximizing transparency will create incentives for accountability.

H. ANNUAL REPORTING REQUIREMENTS FOR MOBILE SERVICE PROVIDERS

Consumer Advocates commend the FCC for adopting reporting requirements for all recipients of USF funds, including mobile service providers. ¹⁷³ Consumer Advocates urge the FCC to adopt comprehensive reporting requirements for mobile service providers. Consumers are paying for the CAF, and therefore should be able to hold providers fully accountable for the use of those public monies. Furthermore, any and all such reports should be entirely public. ¹⁷⁴

The FCC seeks comment on "whether [it] should revise the section 54.313 reporting requirements or adopt new reporting requirements that would apply to support an ETC receives to provide mobile services" on the assumption that there are "basic differences in the nature and purpose of the support" that mobility fund recipients will receive. Under no circumstances should the FCC reduce reporting requirements for mobile service providers without clear evidence that particular reporting requirements have no value or are irrelevant for the Mobility Fund. Fund. 176

The FCC seeks comment on whether Mobility Fund ETCs should report information regarding their progress on build-out plans.¹⁷⁷ While other ETCs may have five-year broadband

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¹⁷³ Notice, at para. 1117, and generally paras. 1117-1120. See, also, Order, at paras. 471-474.

¹⁷⁴ Consumer Advocates' reasoning on reporting requirements and the confidential nature of those reports is also discussed in Section III.A above, in Broadband Public Interest Obligations section.

¹⁷⁵ Notice, at para. 1118.

¹⁷⁶ See, e.g., *id.*, at para. 1120 seeking identification of reporting requirements that are not appropriate for mobile service providers. Consumer Advocates intend to review providers' discussion, if any, on this aspect of the Notice, and respond as appropriate.

¹⁷⁷ *Id.*, at para. 1118.

build-out requirements that do not apply to Mobility Fund recipients, mobile service providers do have coverage requirements. The FCC has concluded that support will be provided in three installments, with the second and third installment dependent upon a showing that coverage benchmarks are met.¹⁷⁸ The Notice's request for comment appears contradictory to the Order's delegation of authority to the Wireless and Wireline Bureaus for determining the method and procedures for documentation required in order to receive installments of Mobility Fund support. The type of information that will be required to receive additional installments of support is the very type of information that should also be available in annual reports of any entity that receives public funds for deployment.

Consumer Advocates strongly support the FCC's determination that all recipients of USF, no matter the technology, provide detailed information regarding outages. The FCC is specifically asking "For mobile service providers, how should the number of affected customers be counted? Should the number of affected customers be the number of customer billing addresses within the affected areas, the average number of customers served by the towers that are out-of-service during the outage, or some other measure?" 180 If the FCC, after reviewing recommendations that it receives in this proceeding, adopts additional outage reporting definitions or requirements for universal service recipients that differ from requirements that already exist under 47 C.F.R. Part 4 ("Disruptions to Communications"), the FCC should consider updating those regulations as well, so that outage requirements apply to all carriers regardless of whether providers receive USF subsidies. In other words, unless there is compelling reason to do otherwise, outage reporting requirements should be standardized across

¹⁷⁸ Order, at paras. 465-467.

¹⁷⁹ *Id.*, at para. 466 and fn 770.

¹⁸⁰ Notice, at para. 119.

technologies and apply to all providers, regardless of whether they receive universal service support.¹⁸¹

H. MOBILITY PHASE I, COMPETITIVE PROCESS IN PRICE CAP AREAS, AND MOBILITY PHASE II

1. Background

The FCC seeks comment on Mobility Fund Phase II¹⁸² and the competitive process in price cap territories where the incumbent declines to make a state-level commitment.¹⁸³ This section of Consumer Advocates' comments addresses auction issues as they relate to these two situations. This section first discusses Mobility Phase I issues, then the CAF process for price cap areas where ILECs do not make a state-level commitment, and then discusses issues relating to the Mobility Fund Phase II. Consumer Advocates discuss the Remote Areas Fund in Section J., below.

As a threshold matter, Consumer Advocates strongly oppose various aspects of the FCC's proposed auction process. The auction process is fundamentally flawed. Furthermore, the FCC's grant of right of first refusal to incumbent carriers violates the Competition in Contracting Act of 1984. Reliance on reverse auctions also exceeds the limited authority given to the FCC to use reverse auctions for spectrum assignment.

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¹⁸¹ See In the Matter of Whether the Commission's Rules Concerning Disruptions to Communications Should Apply to Broadband Internet Service Providers and Interconnected Voice over Internet Protocol Service Providers, ET Docket No. 04-35; WC Docket No. 05-271; GN Docket Nos. 09-47, 09-51, 09-137, Reply Comments of the National Association of State Utility Consumer Advocates on Notice of Inquiry, August 16, 2010; In the Matter of the Proposed Extension of Part 4 of the Commission's Rules Regarding Outage Reporting to Interconnected Voice Over Protocol Service Providers and Broadband Internet Service Providers, PS Docket No. 11-82, Comments of the National Association of State Utility Consumer Advocates and the New Jersey Division of Rate Counsel, August 8, 2011.

¹⁸² Notice, at paras. 1121-1174 ("Section I").

¹⁸³ *Id.*, at paras. 1175-1222 (Section "J').

The Competition in Contracting Act of 1984 ("CICA"), 41 U.S.C. 253, revised the Federal Acquisition Regulations ("FAR") to encourage competition for the award of all types of government contracts. The purpose was to increase the number of competitors and to increase savings through lower, more competitive pricing. The elements of CICA are embodied in Part 6 of the FAR and apply to all solicitations for bids issued after April 1, 1985. The policy of CICA is that: "Contracting Officers shall provide for full and open competition through use of the competitive procedure or combination of competitive procedures contained in this subpart that is best suited to the circumstances of the contract action." ¹⁸⁴ To ensure enhancement of competition, the statute requires the government to obtain full and open competition, and has only a limited number of exceptions to this rule. Agencies are not permitted to use sole-source procurements unless the written authorization of the agency head is obtained and specific statutory or regulatory authority exists for sole source or limited competition. Every deviation from the requirement for full and open competition must be documented in writing and authorized by the appropriate government official. In view of the foregoing, Consumer Advocates believes the FCC must revisit the right of first refusal and its reliance on reverse auctions.

Furthermore, as the discussion below demonstrates in detail, there are numerous problems with the proposed auction process, the consequence of which is to harm consumers through excessive subsidies and inadequate broadband deployment. The auction process should at least be modified consistent with these comments, if not abandoned altogether.

¹⁸⁴ FAR 6.101.

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2. Introduction: Auction Issues in the Notice

The Commission has sought comment on whether or how to utilize an auction process to distribute universal service support on numerous occasions. ¹⁸⁵ The Order now indicates that the Commission has decided that reverse auctions should be utilized to distribute universal support for broadband services, and the Order proposes several different targets for auction-based support distributions. These include separate auctions for one-time and recurring support for mobility funds; an auction to distribute funding to areas where price-cap carriers refuse modelbased support; and an auction associated with the distribution of support to areas where the cost of service is projected to be extremely high. As a general proposition, the Commission assumes that it can use auctions to solve the broadband deployment problem using the existing \$4.5 billion budget, which is based on an assessment on telecommunications services alone – excluding broadband from the contribution base. Given the projections of the "Broadband Gap" associated with the National Broadband Plan, as discussed above, it appears that \$4.5 billion per year will not be sufficient to bridge that gap. 186 Furthermore, the FCC has yet to learn what the new cost model will project. These factors, among many others, point to the importance of expanding the contribution base.

There are several factors that Consumer Advocates find troubling with the FCC's proposed approach to auctions. First, with the reliance on auctions, the FCC increases the risks

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¹⁸⁵ See, for example, *In the Matter of Universal Service Reform Mobility Fund*, WT Docket No. 10-208, Notice of Proposed Rulemaking, October 14, 2010. See also, *In the Matter of Connect America Fund*, *A National Broadband Plan for Our Future, Establishing Just and Reasonable Rates for Local Exchange Carriers, High-Cost Universal Service Support, Developing an Unified Intercarrier Compensation Regime, Federal-State Joint Board on Universal Service, Lifeline and Link-Up*, WC Docket No. 10-90, GN Docket No. 09-51, WC Docket No. 07-135, WC Docket No. 05-337, CC Docket No. 01-92, CC Docket No. 96-45, WC Docket No. 03-109. Notice of Proposed Rulemaking and Further Notice of Proposed Rulemaking, February 9, 2011.

¹⁸⁶ According the Staff broadband model, the overall shortfall is \$23.5 billion, of which \$15.3 billion is initial capital expenditures, and \$17.1 billion is recurring support. These costs are then offset by an expected \$8.9 billion in additional broadband revenues. OBI Report, at 5.

associated with the use of ratepayer funds. By simultaneously redirecting support to both fixed and mobility broadband services and applying untested auction methods, the risks of waste, fraud and abuse are expanded. The Commission points to no example of auctions being successfully applied in similar circumstances. Second, while ostensibly relying on auction theory to support its decision to distribute support through "competitive bidding," the Commission proposes to distribute support based on the lowest bids across areas, rather than on bidding competition within geographic areas. 187 This approach will support the lowest-cost projects, regardless of whether they are economically efficient. Third, by the Commission's own admission, the criteria for distributing support for mobility funds may result in areas receiving support that would have been built out anyway. 188 As a result, the support of mobility broadband will result in waste of ratepayer funds, and given the fixed budget adopted by the Order, will result in lower levels of support for fixed broadband in the areas that truly require such support.. Fourth, despite the consideration of extensive comment on the auction issue, the Commission refuses to provide a reasonable set of guidelines for the development of final auction rules. The Commission points to the advantages of a sealed bid auction process, however, the Commission ultimately defers all auction design issues to the Bureaus. 189 Fifth, while ostensibly favoring a sealed bid approach, which Consumer Advocates agree provides a superior method for distributing support if the Commission is determined to go down the auction path, the Notice ultimately backtracks on the sealed bid proposal, as well as other critical factors. Rather than clearing away the clutter associated with matters such as whether there should be single or multiple auction winners, whether there should be performance standards for the broadband service that is up for auction,

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¹⁸⁷ Appendix O, at para. 20.

¹⁸⁸ Order, at para. 421.

¹⁸⁹ *Id.*, at para. 415.

or whether there should be an affordable price specified in the auction bid, the Notice now requests new comments on these issues that should have been settled already, or punts to the Bureaus. Ultimately the Order and Notice are content to delegate many major issues to the Bureaus, allowing the Commission to wash its hands of responsibility for the structure of the auction process. Given that the efficient utilization of billions of dollars in ratepayer funds is at stake, the Commission's approach is unacceptable.

In the discussion that follows Consumer Advocates sort through the various auction proposals contained in the Order and Notice and offer perspectives on how to correct the deficiencies of the Commission's approach. The fact that Consumer Advocates offer suggestions on how to improve the auction proposals contained in the Order and Notice should not be interpreted as optimism (or an endorsement) on Consumer Advocates' part regarding the potential success of a reverse auction. Rather than reverse auctions, Consumer Advocates continue to believe that if a competitive bidding approach should be used at all, a procurement approach is superior to other untested auction methods. However, Consumer Advocates also continue to believe that the Commission's entire approach to universal service "reform" has been built on a foundation that can only be described as rotten – namely, the Commission's continuing refusal to classify broadband services as telecommunications services. The reclassification of broadband as telecommunications would simultaneously generate the benefits of enabling the expansion of the contribution base and allowing for the legal support of broadband services –

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¹⁹⁰ Using a two standard deviation approach to compare auction bids, should the FCC apply that method, would require that bids be compared on a multi-faceted set of criteria. For example, a bid to serve an area for \$500 per unit while charging a price of \$5 per Mbps is different than a bid to serve the same area of \$400 per household while charging a price of \$10 per Mbps.

¹⁹¹ See, NASUCA's April 18, 2011 Comments, *In the Matter of Connect America Fund, A National Broadband Plan for Our Future, Establishing Just and Reasonable Rates for Local Exchange Carriers, High-Cost Universal Service Support, Developing an Unified Intercarrier Compensation Regime, Federal-State Joint Board on Universal Service, Lifeline and Link-Up,* WC Docket No. 10-90, GN Docket No. 09-51, WC Docket No. 07-135, WC Docket No. 05-337, CC Docket No. 01-92, CC Docket No. 96-45, WC Docket No. 03-109, at 84.

thus giving the Commission greater leverage when addressing broadband support. No auction process can remedy this fundamental deficiency in the Commission's approach.

3. The Order's Mobility Fund Phase I

The Order establishes a "Phase I" mobility fund to distribute \$300 million in one-time support to enable "3G or better" mobility broadband services. ¹⁹² The stated purpose of the fund is to provide a one-time expansion of "current generation mobile wireless services" to close "the mobility gaps" in rural areas where service is unavailable. ¹⁹³ Consumer Advocates appreciate the Order's perspective that the Mobility Fund will be used to support the provision of "voice telephony service" and the "underlying mobility network." ¹⁹⁴ However, this perspective appears to be dispensed with by the time that the Commission gets to the Notice, and it is clear that criteria associated with voice services have little to do with the Commission's objectives as set forth in the Order. For example, when discussing the Commission's responsibility to be mindful of its stewardship of ratepayer funds, the Notice states "we must target limited public funds in a way that expands and sustains the availability of mobile broadband services to maximize consumer benefits." ¹⁹⁵ Alternatively, when discussing the criteria for Mobility Phase II support, the Notice states that:

Under this proposal, any census block where 3G or better service is available from at least one unsubsidized provider would not be eligible for support. Census blocks with 2G service available from an unsubsidized provider as well as census blocks where 3G service is provided only by subsidized provider(s) would be eligible. ¹⁹⁶

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¹⁹² Order, at para. 314.

¹⁹³ Order, at para. 301, 302, 313, 314,

¹⁹⁴ *Id.*, at para. 309.

¹⁹⁵ Notice, at para. 1136.

¹⁹⁶ *Id.*, at para. 1124.

Thus, if the main objective is to close the "mobility gap," the fund as designed will support areas where mobility service is currently available, rather than being exclusively targeted to areas where no mobility service is currently offered. It is unlikely that the funds allotted to the mobility fund are sufficient to achieve the objective of extending mobility service to all areas where such service is currently unavailable.

The Commission recognizes that it has "limited public funds" to utilize. ¹⁹⁷ However, because of the FCC's failure to expand the contribution base to include broadband and data services, the "public" from which CAF funds are raised does not include those who purchase either fixed or mobile broadband or data services. Given the budget constraint imposed by the Commission, the cost of delivering mobility network upgrades will come at the expense of the consumers of telecommunications services who are assessed to generate the "limited public funds" that are at the Commission's disposal. Consumer Advocates believe that the Commission should better refine its objectives with regard to the delivery of mobility services in unserved areas to ensure that only telecommunications services are supported. Alternatively, the Commission should, as long advocated by Consumer Advocates, classify broadband as a telecommunications service, and expand the contribution base accordingly, thus reducing the burden on consumers of telecommunications services, including those consumers who still purchase only basic telephone service.

With regard to the "auction" element of the Order's Mobility Phase I, the Commission proposes to utilize a single-round sealed bid auction to distribute this support, ¹⁹⁸ but ultimately

¹⁹⁷ *Id.*, at para. 1136.

¹⁹⁸ Order, at para. 413.

delegates the final auction design to the Bureaus. ¹⁹⁹ Importantly, the Order establishes criteria for determining the winning Mobility Phase I bidders that are fatally flawed:

Eligible areas will include census blocks unserved today by advanced mobile wireless services. Carriers will be prohibited from receiving support for areas they have previously stated they plan to cover. *The auction will maximize coverage of unserved road miles, with the lowest per-unit bids winning.* ²⁰⁰

As has been discussed previously by NASUCA,²⁰¹ there is a significant difference between determining the award of support based on head-to-head bidding competition in specific geographic areas versus the ranking of bids from lowest-to-highest across geographic areas. The Commission advanced the latter approach in the *Mobility Fund* NPRM:

The auction mechanism would compare all per-unit bids across all areas (that is, compare all bids against all other bids, rather than compare all bids for a single area), and order all the submitted bids from lowest per-unit amount to highest. The bidder making the lowest per-unit bid would first be assigned support in an amount equal to the amount needed to cover the population (or units based on other characteristics) deemed unserved in the specific area at the per-unit rate that was bid. Support would continue to be assigned to the bidders with the next lowest per-unit bids in turn, as long as support had not already been assigned for that geographic area, until the running sum of support funds requested by the winning bidders was such that no further winning bids could be financed by the money available in the Mobility Fund.²⁰²

The Order points to this approach as the one that it favors.²⁰³ While such an approach might "maximize the number of units to be covered in unserved areas given our overall budget for support,"²⁰⁴ this method for determining "auction" winners effectively disposes of the economic rationale for auctions. Any bidding competition in this approach is incidental, as the ranking of

¹⁹⁹ *Id.*, at para. 415.

²⁰⁰ Appendix O, at para. 20, emphasis added.

²⁰¹ NASUCA April 18, 2011 Comments, at 58-59.

²⁰² *In the Matter of Universal Service Fund*, WT Docket No. 10-208, Notice of Proposed Rulemaking, October 14, 2010 ("Mobility Fund NPRM"), at para. 18. See also, *id.*, at para. 64.

²⁰³ Order, at paras. 321-322, 420.

²⁰⁴ *Id.*, at para. 420.

bids from "lowest-to-highest" will favor geographic areas that are easy to serve, and exclude higher-cost areas. A more costly but economically efficient project will be passed over for a less costly and economically inefficient project. The Commission's approach would also likely favor areas that would be built out anyway, given that the cost of an upgrade to the existing network is likely to be much lower than the costs associated with building towers to unserved areas.

The Commission's approach to determining auction winners is of significant concern.

The Notice makes numerous references to the Mobility Phase I approach as providing the basis for other auction frameworks in the Notice. Thus, the flawed approach advanced with Mobility Fund Phase I permeates all auction proposals in the Notice.

4. CAF Phase II—Competitive Process in Price Cap Territories Where the Incumbent Declines to Make a State-Level Commitment

CAF Phase II targets \$1.8 billion in support, ²⁰⁶ and has two components—a cost-model-based distribution of support, ²⁰⁷ and an auction-based distribution of support. ²⁰⁸ The Order makes clear that the process associated with the model-based support will require that the price cap ILEC either "take or leave" the model-based support level projected for the ILEC's entire eligible statewide service area. ²⁰⁹ Thus, the Order appears to prevent the ILEC from picking and choosing among areas in a state where it operates, and the ILEC either takes support for all areas, or abandons support for all areas. Given that the definition of the ILEC's potentially supported

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²⁰⁵ Notice, at para. 1210 for the CAF Phase II auction; para. 1286 for the Remote Areas Fund auction; para. 1129 for Mobility Fund Phase II.

²⁰⁶ Notice, at para. 25.

²⁰⁷ Hereinafter, "CAF Phase II model."

²⁰⁸ Hereinafter, "CAF Phase II auction."

²⁰⁹ Order, at paras. 171-173.

service area will require the identification of areas where unsubsidized carriers operate, ²¹⁰ as well as the development of a cost model and associated "low" and "extremely high cost" thresholds, the extent of the potential service areas that might be offered to ILECs for the "take-it or leave-it" offer is not at all clear. ²¹¹ Likewise, it is also unclear how many ILECs will "take" the yet-to-be developed offers based on the cost model. Further, another unknown is whether the highly fragmented service areas within a state that may result from this approach will be attractive to any entrant, even if aggregation of Census Blocks is permitted.

The Notice indicates that the CAF Phase II auction will target the same areas identified by the model as eligible for support.²¹² The Notice also seeks comment on an alternative approach for determining the eligibility of an area, suggesting three alternative thresholds—no service at any speed; service below 4 Mbps downstream/1 Mbps upstream; or service below 6 Mbps downstream/1.5 Mbps upstream.²¹³ Either the model-based or alternative eligibility criteria raise an important question—namely: Is the CAF Phase II auction about build-out/upgrade costs, or is it about ongoing support? If, for example, there is no service at any speed, or only service below 4 Mbps downstream, getting to a hypothetical threshold of 4 Mbps

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²¹⁰ The eligible statewide service area for an ILEC might be thought of as a donut with multiple types of holes that are ineligible for support: There are areas where an unsubsidized carrier operates. *Id.*, at para. 103. There are also areas where no unsubsidized carrier operates, but that are below a specific cost threshold. *Id.*, at para. 156. And there are areas with no unsubsidized carrier and where costs are above the "extremely high-cost threshold." *Id.*, at para. 168.

²¹¹ The Order notes that a wireless mobility provider might qualify as an "unsubsidized competitor" "by offering a fixed wireless service that guarantees speed, capacity, and latency minimums will be met at all locations with the relevant area." *Id.*, at para. 104. Given the funding for mobility providers that is available from the Phase I and Phase II Mobility Funds, an interesting question arises as to whether there will be feedback across the mobility and fixed funds, with mobility providers potentially eliminating the potential for support due to their "unsubsidized competitor" status. A more likely outcome however, would be the excessive payment of support due to service providers associated with upgraded mobility networks suppressing their ability to become "unsubsidized competitors" in areas where an affiliate ILEC was seeking support. For example, Verizon Wireless would have reduced incentive to deploy fixed LTE in service areas where the Verizon ILEC was seeking support for upgrading DSI.

²¹² Notice, at para. 1189.

²¹³ *Id.*, at para. 1191.

would require one-time investments. Whether these would be covered by the CAF Phase II auction is unclear. The Order states with discussing the CAF Phase II:

First, the Commission will model forward-looking costs to estimate the cost of deploying broadband-capable networks in high-cost areas and identify at a granular level the areas where support will be available. Second, using the cost model, the Commission will offer each price cap LEC annual support for a period of five years in exchange for a commitment to offer voice across its service territory within a state and broadband service to supported locations within that service territory, subject to robust public interest obligations and accountability standards. Third, for all territories for which price cap LECs decline to make that commitment, the Commission will award *ongoing support* through a competitive bidding mechanism.²¹⁴

This lack of clarity regarding the scope of the CAF Phase II auctions is unfortunate. Assuming that the Commission intends that the CAF Phase II auction process will address both build-out and recurring costs in a single auction, the CAF Phase II process will require the auction mechanism to perform some heavy lifting – namely, the bidding process must be robust enough to evoke bids that combine the one-time investments needed to meet the performance threshold specified by the Commission, as well as the ongoing support required in these areas that ostensibly have no business case for broadband.²¹⁵ If there is no robust bidding competition, the prospects for the auction to accurately predict this complicated level of support are less than promising.

Another area for concern associated with the design of the CAF Phase II auction process arises because it is next to impossible to anticipate how much of the \$1.8 billion earmarked for the CAF Phase II will be left after the "take" decision made by price-cap ILECs regarding the offer of the model-based support. Given the uncertainty regarding the size of the CAF Phase II budget remaining (or the number or characteristics of the abandoned geographic areas),

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²¹⁴ Order, at para. 166, emphasis added.

²¹⁵ Notice, at para. 1195.

designing an auction now is extremely difficult. Because the CAF Phase II requires the price cap ILEC to give up statewide support, the number of "orphaned" areas may be very small. Such an outcome might argue for rolling those areas into the Remote Areas Fund rather than relying on a separate auction. Consumer Advocates recommend that the Commission revisit the CAF Phase II auction once the model-based funds have been depleted, and it is more clear as to how many areas will be eligible for competitive bidding, and how much money is left to be distributed across these areas.

5. The CAF Phase II Auction – Is it Really an Auction?

The Notice offers little insight into the actual operation of any proposed auction, or the ranking of auction bids – deferring these "details" to the Bureaus. However, the Notice seeks comment on whether the CAF Phase II auction approach should give priority to areas without any broadband service, going on to suggest that a bidding credit could be offered to promote the support of such areas. Applying a bidding credit is problematic and indicates that the Notice, while discussing "auctions," is actually proposing to determine winners in the same flawed manner as was advanced in the February 8, 2011 NPRM, which proposed that "[a]ll bids, across all areas, would be compared against all other bids, and would be ordered from lowest-price-perunit bid to highest."

The only way that a bidding credit for unserved areas will be applicable is if support is distributed in a non-competitive manner, i.e., where various bids are compared across geographic areas, as opposed to the determination of auction winners based on head-to-head bidding

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²¹⁶ As discussed further below, the Notice does make this suggestion associated with the Remote Areas Fund, but makes other proposals on this matter that are not desirable.

²¹⁷ Notice, at para. 1193.

²¹⁸ Notice of Proposed Rulemaking and Further Notice of Proposed Rulemaking, FCC 11-13 (rel. February 9, 2011), at para. 286.

competition in a single geographic area. To illustrate the problem, consider how the application of a bidding credit, say 25%, would play out.²¹⁹ If two bidders ("A" and "B") were attempting to serve the same unserved geographic territory, applying a bidding credit makes no sense as the bidding credit would affect the bids of "A" and "B" equally (reducing each by 25%). Assuming that "A" and "B" had different bids, one would be lower than the other with or without the bidding credit, and the auction winner would be determined regardless of the presence of a bidding credit.

The application of the Notice's proposed bidding credit is consistent with the alternative "auction" evaluation mechanism, where bids for multiple disparate areas are submitted, and the bids from *across* the various bidding areas are compared with one another and then ranked from lowest-to-highest. Whether there are competing bids in any particular geographic area is not a requirement for such an approach, and thus, the bidding outcomes are not the result of auction competition, but simply reflect the fact that some areas might cost more to serve than others (or, if there is no bidding competition in a specific geographic area, the higher bid might also reflect an inefficient operator and/or the lack of bidding competition). With this type of auction evaluation format, the bidding credit gains some traction, as it favors projects that are more costly (or more inefficient). Bit this type of "low to high" ranking auction process does not provide any reliable information regarding the economic cost of serving an area, and will likely result in the excessive distribution of funds precisely because of the lack of bidding competition within specific areas. NASUCA summarized the pitfalls of this approach in its April 18, 2011 Comments:

The Commission must recognize that this auction approach is not an "auction" at all. Rather, the method simply groups projects in different geographic areas from

²¹⁹ The Notice separately proposes a bidding credit for tribal areas. See, for example, Notice, at para. 1171.

least to most expensive, and will draw a cut-off line based on the amount of funds that are available. As a result, the relationship between the outcome and economic efficiency is unknown. It is possible that "low cost" but economically inefficient projects will trump "high cost" but economically efficient projects. Because there is no bidding competition on any specific geographic area, the Commission will be left taking the applicant's word that their project is a good one relative to other projects.

The Notice's non-competition "auction" framework does not bode well for the CAF Phase II auction approach.

6. CAF Phase II Auction and Minimum Performance Requirements

As discussed above, the Notice initially identifies the performance criteria associated with the CAF Phase II model-based support as required for the CAF Phase II auction. The Notice later proposes to consider "relaxing" minimum performance requirements so that it may "expand the pool of technologies potentially eligible to compete for support." The Notice indicates that auction bidders could offer different performance characteristics and different prices, with the Commission then "scoring" the differences across bids. The Notice also requests comment on how the Commission should score both the quality differences and the prices that will be included in the bids. As a general proposition, Consumer Advocates recommend that if the Commission goes down the "variable price/variable quality" bid scoring path, it should develop a simple and robust set of criteria that remains clearly focused on the Commission's basic broadband speed and latency objectives and affordable prices. Simplicity will benefit bidders and, ultimately, the public. The application of complex scoring mechanisms for bid evaluation will introduce a subjective element that makes it more likely that the outcome

²²⁰ NASUCA April 18, 2011 Comments, at 59.

²²¹ Notice, at para. 1189.

²²² *Id.*, at para. 1204.

²²³ *Id*.

²²⁴ Id.

of the auction will be removed further away from the outcomes predicted by economic theory. However, the proposal to apply a separate performance standard to the services supported by an auction and services supported by the model raises larger issues that must be considered by the Commission.

When considering the CAF Phase II auction, the Commission must keep the requirements associated with CAF Phase II "Model" rules in mind, and should ensure that the rules associated with the two interrelated components of CAF Phase II be designed to work in harmony. With regard to CAF Phase II "Model," the Notice proposes to specify a set of public interest obligations related to upstream and downstream speeds, latency, and usage capacity, as well as affordability. In addition, the Order also specifies build-out requirements. All of these factors will affect the price cap ILEC's decision as to whether or not to accept the model-based level of support. Should the price cap ILEC refuse the support, the Commission should abide by the same set of requirements when moving to the CAF Phase II "Auction" approach. If the Commission were to lower the performance standards (and/or raise the price) when moving to the auction phase of CAF Phase II, it would create an inconsistent set of incentives.

The interaction of the CAF Phase II incentives across the "model" and "auction" portions of the process are all the more important given that the FCC states that "[w]e anticipate that price cap ETCs that decline model-determined support would remain eligible to participate at auction..." Given the lower quality and/or higher prices that might be associated with the auction for the same service area, the price cap ILEC might have a new perspective on the

Order, at paras. 24, 160. With regard to affordability, the Order also proposes to qualify the unsubsidized provision of broadband (that might make an area ineligible for support) based on whether the alternative source of broadband is affordable. *Id.*, at para, 170.

²²⁶ *Id.*, at para. 160.

²²⁷ Notice, at para. 1198.

desirability of pursuing support. The ability of a price cap ILEC to "opt out" of the model-based support but nonetheless participate in the auction undermines the usefulness of the model, and opens up the possibility of gaming on the part of the price cap ILECs. As a general proposition, if the Commission wants to increase the credibility of the model-based support offer, it should preclude the price cap ILEC from participating in the CAF Phase II auction. Lowering the service quality and/or raising the price associated with the CAF Phase II auction would undermine the usefulness of the model. Thus, the same standards should apply in both Phases of CAF Phase II. 228

7. CAF Phase II Auction Process

The Notice indicates that the detailed auction procedures should be delegated to the Bureaus, consistent with the rules established for Mobility Fund Phase I and proposed for Mobility Fund Phase II. As discussed in other sections of these comments, Consumer Advocates believe that the Order and Notice have given an undue level of discretion to the Bureaus, thus ignoring the extensive record associated with the general desirability of auctions, and specific recommendations regarding how to make competitive bidding more efficient, should the Commission go down that path. With regard to the auction process associated with the CAF Phase II, the Notice offers even less guidance than in other sections. This is unfortunate as the Notice describes an auction process associated with the CAF Phase II that places high demands on auction performance.

8. Package Bidding

The Notice does indicate that it believes that package bidding "that could be tailored to the needs of prospective bidders as indicated during the pre-auction notice and comment period"

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²²⁸ If the CAF Phase II auction generated sufficient entry, and bidding resulted in a higher cost than that projected by the model, it might make sense to allow the ILEC the right to re-bid for the auction-determined amount.

should be within the discretion of the Bureaus.²²⁹ While package bidding may have some merit, it is not clear how much "tailoring" should be undertaken to address preferences of specific bidders. If package bidding is allowed, the complexity of evaluating bids will increase, and the Commission should be clear up front to bidders regarding the Commission's ability to accept or reject package bids. For example, the Commission should not structure package bidding in a manner that could result in situations where the acceptance of some "low bid" packages resulted in the overall cost of support increasing.²³⁰

9. Reserve Prices

The Notice requests "preliminary" comment on determining reserve prices, specifically whether the cost model should have a role.²³¹ The CAF Phase II auction must rely on a reserve price, and should rely on the model-based support offered to the price cap ILEC.²³²

10. CAF Phase II Summary

The CAF Phase II auction suffers from the same potential deficiency as the Mobility Fund I auction – if areas are simply ranked from least-cost to highest-cost, there is no bidding competition, and economic efficiency is undermined. In addition, the Commission has left far too many important issues associated with the CAF Phase II undecided—kicking the auction "can" to the Bureaus. This is not a reasonable resolution of the complex issues associated with auction design and the evaluation of auction bids.

²³⁰ Such a situation might arise if two bidders offered bids for service areas that had a substantial overlapping portion. If one carrier's package bid was accepted, the other carrier's package bid must necessarily be rejected, potentially leading to higher total costs than if the bidding were to take place on a non-package basis.

²²⁹ Notice, at para. 1210.

²³¹ *Id.*, at para. 1212.

²³² As noted above, it is appropriate to model with price cap ILEC's costs accounting for economies of scale. The cost model should be designed so that the cost estimates in a Census block can be produced while including the general economies of scale that arise from serving the areas surrounding the Census block eligible for support.

11. Mobility Fund Phase II

The Notice indicates that its objective of Mobility Fund Phase II is "to ensure 4G mobile wireless services in areas where such service would not otherwise be available."233 This objective differs slightly from the Mobility Fund Phase I proposed in the Order which is described as having the objective of extending "the availability of mobile voice service on networks that provide 3G or better performance and to accelerate the deployment of 4G wireless networks in areas where it is cost effective to do so with one-time support."²³⁴ Regardless of this lack of consistency, Consumer Advocates continue to doubt whether the Commission has the authority to utilize universal service funds to support the deployment of mobility data services, because mobility data services have not been classified as telecommunications services. While the Joint Board has recommended support for mobility services, "The Joint Board in recommending, and the Commission in establishing, the definition of the services that are supported by Federal universal service support mechanisms shall consider the extent to which such **telecommunications services**" meet the criteria set out in 254(c)(1)(A)-(D). ²³⁵ Until the Commission classifies broadband services (including mobility broadband) as a telecommunications service, extending support to broadband is inconsistent with the Commission's statutory authority.

While Consumer Advocates do not believe that universal service funds should be used to support mobility data services, some observations regarding the Notice's flawed approach to mobility broadband are offered. For example, the Notice's focus on 4G services is likely to

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²³³ Notice, at para. 1121.

²³⁴ Order, at para. 322.

²³⁵ 47 U.S.C. § 254(c)(2) (emphasis added). The Joint Board's recommendation that mobility be classified as a supported service (Joint Board 2007 Recommended Decision, 22 FCC Rcd at 20491-94, ¶¶ 55-68) was focused on mobile telecommunications services.

induce inefficient investment. The main driver for the deployment of 4G services in urban areas is spectrum efficiency. However, due to lower population densities in rural areas, spectrum shortages are not the major issue. Thus, if the objective is to deploy high-performance mobility broadband in rural areas on a limited budget, the desirability of an immediate transition to 4G is not cut and dried. For example, 3G HSPA-based solutions have advantages over 4G, in that they are more economical to deploy, and because they are fully backward compatible with a carrier's existing 3G GSM technologies. When an upgrade to HSPA+ occurs, previous generation handsets perform better. When 4G LTE is deployed, a consumer must upgrade to an LTE-based handset to get any benefits from the technology. Thus, while 4G (LTE) may be depicted as the goal of mobility broadband, determining the best path forward is a more complex undertaking.

In rural areas where spectrum constraints are less likely to be binding, LTE deployment is much less of an issue—low density and HSPA+ deliver similar performance as LTE. For example, Telestra, an Australian telephone company has utilized HSPA to achieve cost effective advanced wireless service rollouts in rural areas:

Efficient Network Investment and Operation—HSPA+ was designed to enable mobile operators with existing UMTS or HSPA networks to really sweat their original investment in base stations and other network hardware. Telstra achieved 21Mbps peak rates simply by loading new software across its network elements, supplied by Ericsson, rather than ripping out and replacing its hardware infrastructure. ²³⁶

In summary, given a limited budget, the Commission should direct funds in a manner that will deliver the "most bang for the buck." It is not at all clear whether the benefits that will arise associated with the deployment of 4G networks in unserved areas will outweigh the costs (especially when considering the handset compatibility issue). To the extent that the

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²³⁶ GSMA Case Study Series, "Telstra, The World's Fastest Mobile Broadband." Available at: http://hspatitian.profissionhosting.com/case-studies/default.asp

Commission decides that it must support mobility data services in rural areas, support that encourages high-quality 3G deployment will spread support over a wider area, and result in service deployment that can be utilized by a larger number of customers.

12. Support Target

With Mobility Fund Phase I, the Commission indicates that the basis for calculating the number of "units served" in each unserved Census Block will be the number of road miles, regardless of population, ²³⁷ and the Notice also follows this convention. ²³⁸ Consumer Advocates believe that by excluding population from the "units served" calculus, the Mobility Fund will result in an inefficient use of funds. It makes little sense to give a higher priority to unserved areas that might have a high number of road miles, but negligible population, potentially leaving other unserved areas with higher population and a smaller number of road miles without service. It would be extremely easy to weight road miles by population, and thus generate a more reasonable basis for determining the number of unserved units. ²³⁹ When discussing the basis for support in the Phase II Mobility fund, the Notice indicates that "other units" might be considered. ²⁴⁰ Consumer Advocates urge the Commission to adopt a population-weighted road mile basis rather than road miles alone.

13. Phase II Mobility Fund Auction

The Commission proposes to delegate the details associated with the Phase I and Phase II

Mobility Fund auction rules to the Bureaus.²⁴¹ Consumer Advocates do not agree with this

²³⁷ Order, at para. 350.

²³⁸ Notice, at para. 1122.

²³⁹ For example, data on the population in the Census Block and the overall population in all unserved areas could be used to generate a weight that would be used to adjust the number of road miles to "population-weighted road miles."

²⁴⁰ Notice, at para. 1122.

²⁴¹ Order, at para. 330; Notice, at para. 1153.

approach. The Commission has collected substantial record evidence regarding the efficacy of auctions in general, and how best to structure an auction, should it go down that path. While offering some general, but at times contradictory, guidance to the Bureaus regarding the structure of the auctions, the Commission has essentially punted the critical auction design issue to the Bureaus, leaving the Commission to apparently wash its hands of the details of how billions of dollars in ratepayer funds will be distributed. Given the entirely untested auction approach in the highly complex market environment associated with fixed and mobility services, this is entirely unacceptable. The Commission's apparent hope is that "market forces" will do a better job at distributing funds than the Commission has. However, there is every indication that market forces are not up to the job, which increases the risks associated with auctions. ²⁴² In fact, the Order and Notice cannot and do not provide a single successful example of auctions being used to distribute universal service support in areas where incumbents already receive support, much less to distribute billions of dollars to support broadband deployment in areas where incumbents already receive support for providing voice services. The failure of the Commission to provide to the Bureaus anything more than the general and conflicting instructions contained in the Order and Notice is likely to pave the way to an epic policy failure.

Also missing from the Order and Notice is any consideration of how the Commission will evaluate auction outcomes, or how it will extract itself from this policy direction should auctions fail to perform as expected. Even if things generally unfold as the Commission expects, the Commission is unrealistic if it believes that no auction will have sub par outcomes or outright failure. The Order and Notice make no mention of how the Commission will evaluate auction

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²⁴² See, for example, Affidavit of Trevor R. Roycroft, Ph.D. On Behalf of the National Association of State Utility Consumer Advocates, The Maine Office of Public Advocate, Office of The Ohio Consumers' Counsel, Pennsylvania Office of Consumer Advocate, And The Utility Reform Network, filed July 12, 2010 *In the Matter of Connect America Fund, A National Broadband Plan for Our Future, High-Cost Universal Service Support*, WC Docket No. 10-90, GN Docket No. 09-51, WC Docket No. 05-337 ("Roycroft Affidavit"), at 37-39.

outcomes (which given the new and risky approach is certainly prudent), and no contingency planning in the event that auctions fail or exhibit unexpected outcomes. The Commission should take immediate steps to formulate robust auction evaluation protocols, and as will be discussed in more detail below, to shield the public from auction outcomes that are likely to be sub par—for example, those that will arise if there is insufficient auction entry.

With regard to the delegation of auction design to the Bureaus, the Commission indicates that public notice will be released prior to the auction date seeking comment on specific detailed auction procedures to be used, consistent with the general auction rules. Consumer Advocates are concerned that this approach will limit input on the auction process to potential auction participants, who have every incentive to undermine the degree of competition that an auction will generate. Consumer Advocates believe that when the Bureaus have developed the reverse auction rules, that the Commission should put the proposed rules out for comment in a standard rulemaking procedure.

14. Single Round Format? Multiple Round Format?

In the *Mobility Fund NPRM* the Commission proposed a single-round sealed bid approach.²⁴⁴ Given due consideration of the comments received in response to this proposal, the Order continues to point to the desirability of the single-round approach:

We are not convinced that multiple bidding rounds are needed in order for bidders to make informed bid decisions or submit competitive bids. A Mobility Fund Phase I auction provides a mechanism by which to identify whether, and if so, at what price, providers are willing to extend coverage over relatively small unserved areas in exchange for a one-time support payment – decisions that depend upon internal cost structures, private assessments of risk, and other factors related to the providers' specific circumstances. While uncertainty about many of these considerations must be taken into account when determining a bid amount, as when making other financial commitments, the bid amounts of other auction

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²⁴³ Notice, at para. 1153.

²⁴⁴ Mobility Fund NPRM, at para. 17.

participants are unlikely to contain information that will affect significantly the bidder's own cost assessments and bid decisions. Nor do we agree that a single round auction for Mobility Fund Phase I support, as opposed to a multiple round format, would have an adverse effect on industry structure, as asserted by one commenter. For all these reasons, we would be inclined to implement our proposal to conduct Phase I auction using a single-round sealed bid format.²⁴⁵

In spite of this reasoning, the Notice proposes a "rule" that "a Phase II auction may be conducted in a single round of bidding or in a multiple round format, or in multiple stages where an additional stage could follow depending upon the results of the previous stage." Further, both the Order and the Notice each go on to leave the final auction structure to the Bureaus.

Consumer Advocates believe that this is a mistake. Economic theory, as well as record evidence arising from various proceedings, weigh in favor of a sealed bid approach.²⁴⁷ As noted by a leading expert on auctions, the sealed bid approach offers significant benefits:

In a standard sealed-bid auction...each bidder simultaneously makes a single "best and final" offer. As a result, firms are unable to retaliate against bidders who fail to cooperate with them, so collusion is much harder than in an ascending auction. Tacit collusion is particularly difficult since firms are unable to use the bidding to signal.... From the perspective of encouraging more entry, the merit of a sealed-bid auction is that the outcome is much less certain than in an ascending auction. An advantaged bidder will probably win a sealed-bid auction, but it must make its single final offer in the face of uncertainty about its rivals' bids, and because it wants to get a bargain its sealed-bid will not be the maximum it could be pushed to in an ascending auction. So "weaker" bidders have at least some chance of victory, even when they would surely lose an ascending auction.... It follows that potential entrants are likely to be more willing to enter a sealed-bid auction than an ascending auction.

Thus, the sealed-bid approach addresses the most pressing issues in auction design – "Much of what we have said about auction design is no more than an application of standard antitrust

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²⁴⁵ Order, at para. 415.

²⁴⁶ Notice, at para. 1155.

²⁴⁷ As will be discussed further below, Consumer Advocates continue to advocate for an RFP-based procurement mechanism, which is consistent with a sealed bid approach.

²⁴⁸ Klemperer, Paul. *Auctions: Theory and Practice*, Princeton University Press, 2004, p. 114.

theory. The key issues in both fields are collusion and entry."²⁴⁹ Given the small numbers of bidders that are likely in the auctions proposed by the Commission, encouraging entry and deterring collusion should be the Commission's primary focus—and the sealed bid approach is more likely to assist in these critical areas.

As noted by Consumer Advocates, multiple round auctions are more likely to improve outcomes when "common values" are present. 250 When it comes to competitive bidding for fixed broadband support, it is likely that an alternative bidder such as a cable operator or municipal broadband provider will have a very different cost structure than an ILEC. Thus there is no reason to expect that a cable operator or municipal broadband provider would gain any useful information regarding the formulation of its bid by observing the bids of an incumbent wireline carrier. 251 Similar logic applies with wireless carrier operations. Alternative wireless carriers operate with different scale characteristics, and with different frequency bands. Buildout costs will vary depending on the frequency band utilized by the carrier. ²⁵² In the context of an auction in a multiple-round "outcry" format, where auction participants observe one another's bids, the build-out cost differences will only become apparent to the various participants, and affect bidding strategies. For example, if a cable operator could offer the broadband service at a substantially lower cost than the ILEC, observing an ILEC's very reluctant bid reductions could easily result in the cable operator winning the auction with an unnecessarily high support margin above its costs. Similarly, a wireless carrier that had access to spectrum in the below 1 GHz range, by observing the bidding strategy of other wireless carriers might result in the final bid

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²⁴⁹ *Id.*, p. 121.

²⁵⁰ Roycroft Affidavit, p. 47.

²⁵¹ I.e., useful from the seller's point of view.

²⁵² Order, at para. 398.

awarding excessive support. Consumer Advocates encourage the Bureaus to go with the sealed bid format that is supported by the record.

15. Auction Cancellation

As noted above, Consumer Advocates have previously advised the Commission that auctions are not a reasonable approach for distributing universal service support.²⁵³ However, Consumer Advocates have also previously informed the Commission that should the Commission decide to pursue auctions, one of the key elements of the success of any auction is the amount of auction entry that occurs.²⁵⁴ Bidding competition requires multiple competitors engaging in earnest bidding competition in each geographic area. A small number of bidders are more likely to generate collusive outcomes.²⁵⁵ Consumer Advocates are concerned that the Commission does not appear to understand this key concept. For example, the Notice questions:

[S]hould we permit eligible providers to seek support together, provided that they disclose any such arrangements when applying for a Mobility Fund auction?²⁵⁶

Such a bidding coalition could undermine the potential efficiency of an auction. Bidders acting in concert certainly cannot compete against one another. On the other hand, if the concern is the disparate size of bidders, with the bidding coalition formed to match the resources of an eligible incumbent wireless carrier, then the resulting small number of bidders also does not bode well for auction competition.²⁵⁷

The Notice indicates that it would consider the cancellation of an auction for various reasons "including natural disasters, technical failures, administrative necessity, or any other

²⁵³ See, for example, Roycroft Affidavit.

²⁵⁴ Roycroft Affidavit, pp. 37-38.

²⁵⁵ See, for example, Klemperer, Paul, "Using and Abusing Economic Theory," 2002 Alfred Marshall Lecture to the European Economic Association, p. 13. http://www.nuff.ox.ac.uk/economics/papers/2003/W2/usingandabusing.pdf

²⁵⁶ Notice, at para, 1137.

²⁵⁷ For example, if an area had the potential to be served by one of either two smaller firms or a larger carrier, the combination of the two smaller firms into a single bidding entity would result in a duopoly bidding outcome.

reason that affects the fair and efficient conduct of the bidding." The fair and efficient conduct of bidding will certainly be affected by the number of bidders that partake in an auction. The *ex ante* assessment of the potential number of bidders should be a key element in deciding whether or not to proceed with an auction. Auctions that are characterized by a small number of bidders (certainly two or three, but potentially higher numbers) are likely to result in excessive support payments, and should be suspended.

J. REMOTE AREAS FUND²⁵⁹

1. Background

In its Order, the FCC establishes an annual budget of at least \$100 million to deploy affordable broadband service to an estimated "less than one percent" of Americans who live in remote areas, ²⁶⁰ where the cost of such deployment is "extremely high," and in the Notice, the FCC seeks comments on various aspects of a newly created Remote Area Fund ("RAF"), which the FCC has established to target subsidies to these extremely costly-to-serve areas of the country. ²⁶¹ The FCC relies, in part, on the CQBAT model's prediction that approximately 670,000 locations are not yet served by any terrestrial broadband service. ²⁶² For context, in the NBP, the FCC estimated that extending broadband to reach the 250,000 households with the

²⁵⁸ Notice, at para. 1163.

²⁵⁹ This section of Consumer Advocates' comments correspond with the issues in Section "K" of the FCC's Notice, which encompasses paragraphs 1223-1295.

Approximately one percent of the nation's population is three million people, and about 1.3 million housing units. As of 2010, there were approximately 309 million people in the United States and approximately 132 million housing units. http://quickfacts.census.gov/qfd/states/00000.html.

²⁶¹ Notice, at para. 1223; Order, at paras. 533-534.

²⁶² Order, at para. 575. Assuming that the RAF were used to provide only one-time sign-up support, the FCC estimates that it could theoretically reach almost all of these 670,000 remote locations within four years. *Id.*, at para. 536. The FCC also recognizes, however, that it may choose to provide ongoing support, which would alter this prediction. *Id.*, at para. 537.

highest cost of service would require approximately \$14 billion, or approximately \$56,000 per household. 263 Defining the households that fall within the RAF designation appears to be an evolving process, which the "in-progress" broadband cost model may partly determine. ²⁶⁴ Even if the "less than one percent" ultimately corresponds with only the approximate 250,000 housing units identified in the NBP (that is, slightly less than one-fifth of one percent of the nation's housing units), the annual budget designated by the FCC clearly falls far short of the amount needed to achieve the FCC's goal of ubiquitous broadband deployment, within any reasonable timeframe. 265

The FCC's ultimate approach for defining which households qualify for the RAF will dictate the actual budget necessary to ensure that the intended households have access to affordable broadband service. Regardless, the annual budget of \$100 million adopted by the FCC seems to be insufficient to achieve the FCC's objective in a timely manner, which, in turn, means that the rules that the FCC adopts for the RAF should include clear criteria for determining a fair way in which, each year, RAF support is distributed throughout the country (e.g., one approach could be to divvy the RAF funds among states in direct proportion to the quantities of "qualifying" remote households located within individual states). Also, the probable paucity of the funds underscores the need for an efficient structure so that dollars are spent prudently. The goal of prudent spending could argue for dedicating RAF support where the highest number of eligible households could and would participate. The FCC has failed, however, to indicate how it intends to balance the potentially conflicting goals of maximizing

²⁶³ NBP, Chapter 8, at 138. This represents two-tenths of one percent of all housing units in the United States. *Id.*

²⁶⁴ The FCC intends to use a cost model to estimate the cost of deploying broadband-capable networks in high-cost areas, including the "extremely high-cost and remote areas" that will receive RAF support. FCC Public Notice DA 11-2026, "Request for Connect America Fund Cost Models," WC Docket Nos. 10-90, 05-337, released December 15, 2011, at 1, citing Order and Notice, at paras. 166, 167, and 1229.

²⁶⁵ The FCC also intends to "adjust support levels as appropriate" for the RAF. Order, at para. 538.

deployment (and subscribership) while ensuring that all regions of the country benefit fairly from the RAF.

The FCC also acknowledges that some remote areas may not be extremely high cost, and that some extremely high cost areas may not be remote, ²⁶⁶ an observation which further underscores the importance of defining unambiguously the households that would qualify under the FCC-promulgated rules for RAF subsidies. The FCC anticipates that services such as next-generation broadband satellite service or wireless internet service provider ("WISP") may be the appropriate technology for serving these areas. ²⁶⁷ At one end of the cost estimate is the NBP estimate of \$56,000 to serve each of the highest-cost households and at the other end is the less readily quantifiable cost estimate associated with potential satellite-based or WISP-based service. ²⁶⁸ Furthermore, it is not clear whether, under any of the FCC's proposed structures for the RAF, satellite service providers or WISPs would step up to the plate to serve customers in extremely high cost areas. ²⁶⁹ Consumer Advocates may address these issues more fully in reply based on their review of potential broadband service suppliers' comments, which could shed

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²⁶⁶ Notice, at footnote 2286.

²⁶⁷ *Id.*, at para. 1224.

²⁶⁸ The NBP relies on the FCC's OBI Report, which states, among other things: "Broadband-over-satellite is a cost-effective solution for providing broadband services in low-density areas. In fact, it could reduce by \$14 billion the gap to deploy to the unserved if the 250,000 most-expensive-to-reach housing units were served by satellite broadband. Satellite broadband, as provided by next generation satellites that will be launched as early as 2011, meets our Broadband Availability Target requirements by offering a minimum speed threshold of 4 Mbps downstream and 1 Mbps upstream and BHOL per user of 160 kbps." OBI Report, at 89.

The OBI Report also acknowledges the issue of the timing of deployment for satellite broadband, stating: "Timing may be an issue if satellite broadband were deployed as the only means of reaching the unserved, as a next-generation satellite takes approximately three years to build. Additionally, with each satellite capable of supporting roughly 440,000 subscribers using our assumptions, satellite operators could be forced to potentially more than double their current monthly subscriber fees, which today range from \$60-80 per month, in order to maintain the same return on investment as today." *Id.*, at 92, cite omitted.

light on providers' interest in and ability to serve remote, extremely high cost areas of the country. ²⁷⁰

The FCC describes various possible program structures for the RAF, and specifically proposes that RAF support be structured as portable consumer support.²⁷¹ As an alternative to such a structure, the FCC seeks comment on (1) a competitive bidding process, (2) a competitive proposal evaluation process (i.e., a Request for Proposal process), or (3) "other ways" that those submitting comments may identify.²⁷² If the FCC decides not to implement means-tested portable consumer support, Consumer Advocates support the use of an RFP-based procurement process, as these comments discuss later in this section.²⁷³ Consumer Advocates first discuss, however, the merits and drawbacks of means-tested portable consumer support for targeting remote area funding efficiently and fairly,²⁷⁴ and also address some of the FCC's questions regarding portable consumer support. Consumer Advocates then address the FCC's alternative program structures in more detail.

States likely are in the best position to assess whether an RFP-type process or a portable consumer support mechanism would best serve the goal of providing affordable broadband in the particular extremely high cost areas within their boundaries. The FCC could consider divvying up the \$100 million in proportion to the quantity of means-tested remote-area households in each state and then permitting individual states to establish either portable

²⁷⁰ Regardless of the appropriateness of satellite service for many broadband functions, it is clear that it is not useful for voice service due to latency. See Section III.J.3. below.

²⁷¹ Notice, at 1225.

²⁷² *Id.*, at paras. 1226-1228

²⁷³ *Id.*, at para. 1227.

²⁷⁴ *Id.*, para. 1225. Rate Counsel has been a long-time advocate for portable consumer subsidies.

consumer support or an RFP process as the most efficient and fair structure for achieving individual states' broadband goals and policies.

2. Portable Consumer Support

a. Merits and drawbacks of portable consumer support

Consumer Advocates support, with reservation, the FCC's proposal to structure the RAF so that it provides portable support to consumers who live in extremely high cost areas, and who also have limited means. Such an approach would target support where it is most needed, and, furthermore, increase the chance that consumers benefit from the program (provided that providers are not permitted to raise prices in response to the presence of consumer support). Consumers ultimately pay for the RAF, through universal service surcharges, and it is fitting that consumers benefit directly from the program. ETCs would only receive support when they provide supported services to eligible customers.²⁷⁵

Consumer Advocates' reservation about portable consumer support is based on two primary concerns: (1) the mere presence of such support may not be sufficient to attract "supply" by satellite-based broadband service providers and WISPs; and (2) in those instances where there is not a clear line of sight, 276 customers may be left unserved. In order to gauge whether portable consumer support would provide a practical structure for the RAF, it is essential to determine with more specificity if and where satellite-based providers would actually offer service, if consumers had access to portable support and the level of support necessary to (1) attract supply and (2) generate consumer demand. Rather than await the results of a cost model that is still "in progress" and indeed that likely will undergo a lengthy and controversial

http://www.wildblue.com/overview/faqs#3_2, site visited January 3, 2012.

²⁷⁵ Notice, at para, 1225.

²⁷⁶ The WildBlue website says: "Do I need a southern line of sight to receive a signal from your satellite? Yes. You will need a clear view of the southern sky to receive a signal from the WildBlue satellite."

review process, the FCC could consider implementing a pilot portable support program in the very near future in selected specific regions of the country where there are both compelling evidence of potential supply by satellite-based and WISP providers and where the FCC can readily and unambiguously characterize the cost of terrestrial supply as "extremely costly." It would be unfortunate to lose the entire year of 2012 while awaiting the outcome of a likely prolonged and much-debated evaluation of a theoretical broadband cost model. Then, subsequently, pending the outcome of the cost model, the FCC could further determine the role of portable support in serving remote areas of the country.

Furthermore, if the FCC adopts portable consumer support, as with the Lifeline/Link Up program, consumer awareness is essential to yield high consumer participation. Particularly if the program is means-tested, one-time support is likely to be inadequate, and instead, recurring support may be more appropriate to encourage broadband adoption in remote areas. Consumer Advocates assume that the FCC's proposed portable consumer support would continue as long as the consumer qualified. Therefore, the FCC's proposal to focus the RAF "on making voice and broadband affordable for consumers who would not otherwise have the resources to obtain it" is reasonable. The FCC and NTIA should encourage states, as they map their broadband networks, to include geographic data layers that correspond with income data so that the RAF can be particularly advertised and targeted where the likelihood of participation is greatest. 278

The use of a means test appropriately recognizes that ultimately all consumers must bear the cost of the RAF, and therefore, portable support should be directed to those households

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²⁷⁷ Notice, at para. 1249.

²⁷⁸ Consumer Advocates, also, however, reiterate support for the FCC's expeditious adoption of broadband support for Lifeline customers *regardless of where they reside*. Affordability is a barrier to broadband adoption that continues to merit the same level of FCC action as does availability. Therefore, although Consumer Advocates certainly encourage support to ensure ubiquitous broadband deployment, the FCC should not delay any longer in making broadband support available for low-income households throughout the country.

where price is a barrier to adoption, and, furthermore, should recognize that the market price of broadband service in remote areas is likely prohibitive for a much broader population than the group of households who qualify for the very low income guidelines of the Lifeline Program. Furthermore, Consumer Advocates concur with the FCC that ETCs should be required to pass the support they receive in its entirety to the subscriber, consistent with the Lifeline program. However, it is essential that any mechanism prevent the ETC from *increasing* its price as a direct result of the RAF support. Further, consumers who receive the RAF portable support should be afforded the flexibility to apply the discount to any service package that ETCs offer. ²⁸¹

The FCC seeks comment on various other aspects relating to structuring the RAF based on portable consumer support including:

- Subscriber qualifications;
- Setting the amount of the support;
- Terms and conditions of service; and
- Budget.

The FCC also raises questions regarding general implementation issues (such as the definition of remote areas, provider qualifications, term of support, and public interest obligations including service performance criteria and pricing). The way in which the FCC addresses these issues, which are pertinent regardless of the program structure that the FCC adopts, directly affects any benefits that may flow to consumers. Consumer Advocates address these topics later in this section.

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²⁷⁹ Notice, at para. 1252.

²⁸⁰ *Id.*, at para. 1253.

²⁸¹ *Id.*, at para. 1254.

²⁸² *Id.*, at paras. 1229-1254.

b. Subscriber qualifications

Consumer Advocates concur that the support should be limited to a single amount per household.²⁸³ Furthermore, a consumer's decision to obtain RAF support should not jeopardize Lifeline eligibility.²⁸⁴ A means test is an appropriate way to identify those households for which a lack of disposable income presents a barrier to broadband adoption, and should, therefore, be an integral element of portable consumer support in remote areas.²⁸⁵

The FCC seeks comment on the appropriate standard for a means test. Although using the criteria that are now used for the Lifeline program could maximize administrative efficiency, the criteria are so strict that they would fail to make broadband affordable for many households of limited means. The price of broadband, particularly in remote areas, typically exceeds that of voice, and the market price of broadband in remote areas likely would be yet higher than elsewhere in the country. For these reasons, Consumer Advocates support a means test that encompasses more households than does the Lifeline program, such as the guideline of using 200% of the poverty level that the FCC discusses. Merely deploying broadband is not in and of itself sufficient for encouraging adoption. On the other hand, it would not be a wise use of public monies for the RAF to support well-to-do households that have chosen to live or to establish second homes in remote parts of the country. Raising the income threshold relative to the Lifeline Program to include a broader group of low-income households would balance

²⁸³ *Id.*, at para. 1256.

²⁸⁴ *Id.*, at para. 1258.

²⁸⁵ *Id.*, at para. 1261.

²⁸⁶ *Id.*, at para. 1262.

²⁸⁷ See *id.*, at footnote 2318 for information regarding the eligibility criteria for the Lifeline and Link Up programs.

²⁸⁸*Id.*, at para. 1262.

²⁸⁹ Consumer Advocates concur with the FCC that the RAF should be "focused primarily on making voice and broadband affordable for consumers who would not otherwise have the resources to obtain it." *Id.*, at para. 1249.

properly the objective of using funds prudently with the objective of ensuring that households with limited disposable income can afford the otherwise price-prohibitive broadband service offered in extremely high cost areas.²⁹⁰

c. Setting the amount of the support

As the FCC observes, "current satellite services tend to have significantly higher monthly prices to end-users than many terrestrial fixed broadband services, and frequently include substantial up-front equipment and installation costs." The FCC should collect pricing data from providers, ²⁹² and, furthermore, should require any provider that receives RAF support to submit detailed pricing data to the FCC on a semiannual basis.

The FCC seeks comment on how to establish the appropriate support amount for monthly satellite voice-broadband service charges.²⁹³ The FCC raises the possibility of providing a monthly support amount equal to the difference between the retail price of a "basic" satellite voice-broadband service and "an appropriate reference price for reasonably comparable service

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²⁹⁰ Consumer Advocates have previously stated: "The establishment of an identical [income] threshold for voice and broadband service will ensure that there is less confusion among participants; eligible telecommunications carriers ("ETCs"); social services agencies; and potential participants than if the eligibility requirements were distinct for broadband. Indeed, a supported service is a supported service and consumers should have one income eligibility requirement for all supported services." *In the Matter of Lifeline and Link Up Reform and Modernization; Federal-State Joint Board on Universal Service; Lifeline and Link Up*, WC Docket No. 11-42; CC Docket No. 96-45; WC Docket No. 03-109, Comments of the National Association of State Utility Consumer Advocates and The New Jersey Division of Rate Counsel, August 26, 2011, at 5-6. Comments were filed in response to Federal Communications Commission Public Notice, "Further Inquiry into Four Issues in the Universal Service Lifeline/Link Up Reform and Modernization Proceeding," WC Docket Nos. 11-42, 03-109; CC Docket No. 96-45, DA 11-1346, August 5, 2011. Upon further reflection, however, the goal of administrative simplicity is overshadowed by the more important criterion of ensuring that the support assists a broader group of low-income households, particularly because broadband prices vastly exceed those of voice prices.

²⁹¹ Notice, at para. 1266.

http://www.nationwidesatellite.com/HughesNet/service_plans/HughesNet_plans.asp. Monthly prices for HughesNet's broadband services range between \$39.99 and \$99.99 depending on the speed. Site visited January 3, 2011. WildBlue requires one to enter a zip code in order to obtain pricing information. http://www.wildblue.com/options/availability. Site visited January 3, 2011.

²⁹³ Notice, at paras. 1266-1268.

in urban areas." ²⁹⁴ However, in the absence of broadband subsidies for Lifeline participants, the "comparable" urban rate may still present a barrier for the means-tested households that are the intended RAF beneficiaries.

d. Terms and conditions of service.

Consumer Advocate oppose carriers' requirements that subscribers enter into 24-month contracts, ²⁹⁵ and recommend that carriers waive such requirements for those customers with RAF-based support.

e. Budget

If requests for reimbursement are less than the budgeted amount, ²⁹⁶ the FCC should expeditiously assess whether the program is achieving the intended goal. The Commission also seeks comment on how to ensure that the budget under the portable consumer support structure is maintained.²⁹⁷ The Commission must ensure that the mechanism for any cap is set in advance.

3. Auction Approaches for the Remote Areas Fund

The RAF differs from the previously-discussed funds in that the proposed solution to the lack of broadband is likely to exclude terrestrial wireline providers. The primary avenue for solving the broadband shortfall in these areas is expected to be satellite services. ²⁹⁸ Consumer Advocates are concerned that the Notice is less than clear regarding the issue of the provision of high-quality voice services in these areas. For example, due to the latency associated with satellite broadband, which typically is at least 240 milliseconds due to distance between the

²⁹⁴ *Id.*, at para. 1267.

²⁹⁵ *Id.*, at para. 1273.

²⁹⁶ *Id.*, at para, 1274.

²⁹⁷ Id.

²⁹⁸ *Id.*, at para. 1224.

satellite and the earth station, voice services are significantly degraded when provided over geostationary satellite links. Satellite Internet providers like HughesNet and WildBlue do not provide voice service today.²⁹⁹ Thus, just where voice service comes from with the RAF is less than clear from the Notice.

Consumer Advocates are concerned that the Notice, in the effort to apply the same principles used outside of the extremely high cost areas associated with the RAF (i.e., joint support for voice and broadband), is willing to sacrifice the continued availability of high-quality voice service. Given the "outlier" nature of these high-cost areas, Consumer Advocates believe that flexibility on the issue of joint provision of voice and broadband is a reasonable approach. While it is certainly the case that economies of scope exist in the "lower cost" high-cost areas, and joint support for voice and broadband service thus makes sense, the problems with degraded voice services provided over satellite may require overlapping support, where ILECs provide supported voice services, and satellite providers offer supported broadband services.

a. Is the RAF Budget Sufficient?

The Notice targets an annual budget of \$100 million for the RAF to ensure that the "less than one percent of Americans living in remote areas where the cost of deploying traditional terrestrial broadband networks is extremely high can obtain affordable broadband." Modeling associated with the National Broadband Plan identified the most expensive 250,000 housing units as being associated with 57% of the overall projected \$23.5 billion broadband gap. Thus, targeting those most expensive housing units would appear to be a critical component of

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²⁹⁹ Review of HughesNet and WildBlue web sites, December 16, 2011.

³⁰⁰ Notice, at para. 1224.

³⁰¹ OBI Report, at 40-41.

economically deploying broadband to all Americans.³⁰² Using the 250,000 housing unit target, the Notice suggests an annual support level of \$400 per household (about \$33 per month). However, the Notice offers alternative perspectives on how the \$100 million budget might be applied, suggesting the monies might be used for one-time support in some years, or as ongoing support.³⁰³ The Notice later concludes that until a cost model is complete, that RAF funds will be one-time-only.³⁰⁴

b. The Notice all but Assures a False Start for the RAF

The Notice indicates that the RAF will ultimately serve consumers of both price cap and rate-of-return carriers. The Notice indicates that the identification of the highest-cost areas eligible for RAF funding will be determined by a forward-looking high-cost model, but that due to the objective of distributing RAF funding by the end of 2012, and the anticipated lack of a model by that date, the Commission anticipates distributing initial RAF support absent the use of a Commission-approved model. The RAF support absent the use

While Consumer Advocates appreciate the urgency of the Commission's objective,

Consumer Advocates believe that the Commission has placed the cart before the horse. If the

Commission is to develop a consistent set of targets based on the use of a cost model, then the

Commission should have the cost model in hand prior to developing the targets. Absent the

model, the Notice's suggested alternatives are not reasonable, and are puzzling given that the

 $^{^{302}}$ It is not clear from the Notice whether the 250,000 households from the OBI Report and the "1%" of all Americans unserved is the same target.

³⁰³ Notice, at para. 1231.

³⁰⁴ *Id.*, at para. 1232.

³⁰⁵ *Id.*, at para. 1229.

³⁰⁶ *Id*.

³⁰⁷ *Id.*, at para. 1230.

Notice anticipates that the FCC Staff model will be available by January 1, 2013. Thus, it appears that the Notice risks generating a flawed start to the RAF to gain what will likely be only a few months advantage. Further, the Notice's interim "solutions" to gain the quick launch of the RAF contain serious flaws. For example, the Notice indicates that it might be possible to target "census blocks in price cap territories that are identified by National Broadband Map data as having no wireline or terrestrial wireless broadband service available, subsidized or unsubsidized."³⁰⁹ The Notice then goes on to pose a series of questions that generally illustrate the problems of using the National Broadband Map:

Is the National Broadband Map data sufficiently granular? Given that it is reported voluntarily by broadband providers, may the data be considered reliable enough for this purpose? Is there a risk that use of that metric would result in overlap with areas that likely would be supported by Mobility Fund monies or by funding made available post-state-level commitment?³¹⁰

No, the map is not sufficiently granular; voluntarily-reported data may be unreliable; and "overlap" could be a problem. All of these downsides of starting to distribute RAF monies without the benefit of a cost model point to the flawed approach. While the Notice concludes that because of the pitfalls, one-time-only support will be targeted, jumping the gun on support distribution will have negative consequences that indicate the desirability of waiting until the cost model is finalized.

RAF and ETC Designation c.

The Notice indicates that applicants for RAF support must receive ETC designation.³¹¹ The Notice seeks comment on whether the FCC should "streamline" the ETC process associated

³⁰⁸ Order, at para. 192.

³⁰⁹ Notice, at para, 1230.

³¹⁰ *Id.*.

³¹¹ *Id.*, at para. 1234.

with the RAF by changing "its determination" that carriers seeking non-Tribal land ETC designation must first seek the grant of that status from the state commissions. ³¹² First of all, it is not the FCC's determination that ETCs must first seek grant of status from the state commissions. Rather, that is the statutory requirement. ³¹³ The Notice references section 214(e)(6) as the source of authority with regard to the Commission designating the RAF recipient as an ETC. Consumer Advocates do not believe that section 214(e)(6) grants the Commission such authority. Section 214(e)(6) reads, in part:

In the case of a *common carrier* providing *telephone exchange service and exchange access* that is not subject to the jurisdiction of a State commission, the Commission shall upon request designate such a common carrier that meets the requirements of paragraph (1) as an eligible telecommunications carrier for a service area designated by the Commission consistent with applicable Federal and State law.³¹⁴

This portion of the statute is clear regarding the scope of the Commission authority on this matter. Satellite broadband providers or WISPs are not common carriers. Nor will they provide telephone exchange and exchange access service. Even the Order casts doubt on the ability of satellite providers to provide voice services: "The record before us does not conclusively establish that, at this time, satellite voice services (which typically involve higher latencies than terrestrial services) provide the same consumer benefits as terrestrial voice services." Thus, Consumer Advocates respectfully submit that ETC designation must remain with the states, and the Notice's proposal that the FCC could grant "multi-state or nationwide ETC designation" must be rejected.

³¹² *Id.*, at para. 1235.

³¹³ 47 USC §214(e)(2).

³¹⁴ 47 USC 214(e)(6), emphasis added.

³¹⁵ Order, at para. 540, footnote 904.

d. RAF Public Interest Obligations

The Notice requests comment on the service performance criteria to be associated with voice and broadband services associated with the RAF. The Consumer Advocates are concerned regarding the lack of discussion of satellite voice limitations. As discussed above, satellite voice services are decidedly inferior to those offered by terrestrial providers. Consumer Advocates do not believe that it makes sense to degrade voice services in the pursuit of rural broadband. In those areas where satellite broadband will fail to deliver voice services that are comparable to those offered by wireline providers in both rural and urban areas, consumers should be able to continue to buy supported voice services from their ILEC.

With regard to broadband speed requirements, capacity, and pricing, Consumer Advocates do not see any reason why support for RAF services should be held to a different standard than is the case with non-RAF areas. On the issue of latency, as discussed above, satellite services may have physical limitations that prevent latency that is on par with terrestrial services. Consumer Advocates believe that it would be reasonable for the Commission to specify latency in the case of satellite services that is within 110% of the 240 ms that is associated with a round-trip to a geostationary satellite.

e. RAF Auction Approaches

The Notice describes three alternative and mutually exclusive RAF auction approaches:

- In the first, a per-subscribed location auction, bidders would compete for the opportunity to receive payments in exchange for providing services that meet the technical requirements described above, at a set discounted price, to qualifying locations in an area.
- In the second, a coverage auction, rather than competing for per-subscriber location support based on specified performance and pricing requirements,

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³¹⁶ Notice, at para. 1239.

³¹⁷ *Id*.

bidders would compete for support in exchange for making service available at reasonably comparable rates to any requesting location within a geographic area.

• The third auction alternative, a combined auction, would take place in combination with the competitive bidding process in areas in which the incumbent LEC declines the state-level commitment. 318

In general, Consumer Advocates have the same reservations about the use of an auction with regard to the RAF as is the case with other auction proposals contained in the Notice. The primary issue continues to be the degree of market entry that can be expected. What is certain is that there are very few potential entrants from the satellite segment of the market. WildBlue and HughesNet will likely be the only potential satellite bidders. The scope of additional entry from WISPs is unclear, but it seems unlikely that WISPs would compete in each RAF geographic area. Thus, on the fundamental issue of auction entry, it is conceivable that some (if not most) market areas will face entry from only satellite providers. With this overarching concern in mind, Consumer Advocates will comment on the auction alternatives in turn below.

f. Per-Subscribed Location Auction

With the per-subscribed location auction, the Notice proposes to establish a benchmark price level for services, with bidders identifying the amount of support needed to offer the specified services at the benchmark price. This approach to awarding support would require the determination of an affordable broadband rate, something that the balance of the Order and Notice does not address with any specificity. The Commission can increase the chances of auctions working if an affordable broadband rate is determined, otherwise auction bids will be difficult to interpret.

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³¹⁸ *Id.*, at para. 1276.

g. Coverage Auction

The Notice also requests whether the use of a geographic area other than the Census Block might be desirable, ³¹⁹ and also raises the issue of the desirability of a "coverage auction." ³²⁰ Given the nature of the problem being addressed with the RAF, and the existence of two satellite providers that might be able to successfully provision services, it may make more sense to create the largest possible bidding area, rather than relying on finely granular bidding areas. ³²¹ The Notice requests comment on the minimum geographic unit for bidding, and how that choice relates to package bidding. Given the likely two-bidder structure of the auction, it will be all too easy for the bidders to stake out turf, and undermine bidding competition. As noted by one expert, collusion is all too easy to establish when there are a very small number of bidding rivals:

Another elegant example of bidders' ability to "collude" is provided by the 1999 German DCS 1800 auction in which ten blocks of spectrum were sold by ascending auction, with the rule that any new bid on a block had to exceed the previous high bid by at least 10 percent. There were just two credible bidders, the two largest German mobile phone companies T Mobil and Mannesman, and Mannesman's first bids were 18.18 million deutschmarks per megahertz on blocks 1-5 and 20 million deutschmarks per MHz on blocks 6-10. T Mobil – who bid even less in the first round – later said "There were no agreements with Mannesman. But [we] interpreted Mannesman's first bid as an offer." The point is that 18.18 plus a 10 percent raise equals 20.00. It seems T Mobil understood that if it bid 20 million deutschmarks per MHz on blocks 1-5, but did not bid again on blocks 6-10, the two companies would then live and let live with neither company challenging the other on the other's half. Exactly that happened. So the auction closed after just two rounds with each of the bidders acquiring half the blocks for the same low price, which was a small fraction of the valuations that the bidders actually placed on the blocks. 322

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³¹⁹ *Id.*, at para. 1278.

³²⁰ *Id.*, at para. 1281.

³²¹ The Commission points to the potential impact of WISPs on the bidding process. *Id.*. Whether WISPs will have the ability to undermine the potential for bidding collusion between two much larger rivals is questionable.

Klemperer, Paul, "Using and Abusing Economic Theory," 2002 Alfred Marshall Lecture to the European Economic Association, p. 13. http://www.nuff.ox.ac.uk/economics/papers/2003/W2/usingandabusing.pdf.

Should the Commission go down the path of auctioning RAF support, establishing a single supported provider nationwide (or at least establishing the largest geographic coverage footprint that is technically feasible) will work against the natural proclivities toward collusion that will emerge in the RAF environment. Auctioning off the combined nationwide footprint of RAF locations would reduce the potential for bidding collusion, such that could arise if the two current satellite providers tacitly agreed to divide the market, thus eliminating bidding competition. If the Commission pursues an RAF auction, the Commission should consider an "all-or-nothing" geographic auction. If all RAF geographic areas were combined, then each bidder faces the prospect of coming away with nothing, which would provide a better incentive for aggressive bidding, which could reduce the level of support needed. Furthermore, the "all-or-nothing" approach would also encourage the bidder to exploit economies of scale. To structure this approach, the Commission could identify the combined RAF areas, and determine whether there were any portions of the satellite provider's footprint that did not overlap with the RAF areas. The Commission could then create the largest "all-or-nothing" RAF biding area possible.

h. Single Winners vs. Multiple Winners

The Notice mentions that multiple winners might be considered when awarding RAF support.³²³ The Notice indicates that consumers might enjoy the benefits of a "choice of service providers."³²⁴ The issue of whether auctions should have single or multiple winners is one that has been considered by academic researchers. An auction process will, in theory, create competition "for the market." If competition for the market is robust, then, in theory, the auction will generate efficiency benefits. It has been noted by researchers, however, that the use of an

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³²³ Notice, at para. 1280

³²⁴ *Id*.

auction to try to promote competition *after the auction*, through the support of multiple subsidy recipients ("in-market competition"), can be problematic:

The policy discussions of auctions for universal service often take the benefits of in-market competition for granted. The environments in which these auctions will possibly be implemented, however, are not traditional environments, since they are substantially regulated. One should, therefore, not rely on the economist's gut feeling that competition is *a priori* good for the consumer, and one should rather investigate the nature of the benefits in this specific environment. It is useful in this respect to distinguish between two types of services: supported services, and non-supported or complementary services.

These researchers apply a theoretical model to explore the potential benefits of in-market competition. The key element of their modeling is that auction participants will offer both the basic supported service and complementary services (e.g., broadband data vs. e-mail, web hosting, portal, or video). If there are multiple auction winners, the fact that they will face competition for both the supported and non-supported services due to supporting multiple auction winners has negative consequences:

The first key insight of this analysis is that *in-market competition is a mixed blessing*, for a reason that was analyzed earlier: *Competition* lowers profits on the complementary segment, and therefore *raises the equilibrium subsidy that is demanded by the bidders*. In a sense there is no free lunch. In-market competition is desirable if the deadweight loss associated with the absence of competition in the complementary segment exceeds the increase (associated with the increase in the subsidy) in the deadweight loss on other telecommunications segments financing the universal service plan. ³²⁶

Thus, in-market competition after an auction does not necessarily lead to a superior outcome for consumers, and the promotion of in-market competition through allowing multiple auction winners may lead to higher support payments. Other researchers have also analyzed the impact of in-market competition and reached unfavorable conclusions for an alternative reason –

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³²⁵ Laffont, J. and Tirole, J. Competition in Telecommunications, MIT Press, 2000, p. 251.

³²⁶ *Id.*, p. 254 (emphasis in the original).

pointing to the increased likelihood of collusion associated with auctions that support in-market competition:

COLR (carrier of last resort) auctions for per-subscriber subsidies are more vulnerable to collusion than standard procurement auctions and COLR auctions for lump-sum subsidies. Moreover, the problem is exacerbated if the auction appoints more than one COLR. *The source of the problem is precisely in the added scope for competition "in the market"*: Defectors from collusive agreement in COLR auctions for per-subscriber subsidies can be punished by charging low prices in the market immediately after the auction where a defection occurred....³²⁷

This conclusion, like the previous observation regarding the natural increase in support if multiple providers are supported, suggests that using auctions to support competition is undesirable.

i. Combined RAF and Post-State-Level Commitment Auction

The Notice also proposes a radically different approach to the RAF, which would also combine the post-state-level commitment auction for those cases where the ILEC refused the cost-based model support:

This auction option would combine the budgets available for the post-state-level commitment competitive bidding process and for remote areas, relaxing the performance requirements applicable to providers of fixed services receiving CAF support in order to increase the number of technologies service providers could use. In such an auction, providers could offer different performance characteristics, such as download and/or upload speeds, latency, and limits on monthly data use, and the Commission would score such "quality" differences in evaluating bids. This would give the Commission the ability to make trade-offs between subsidizing a higher quality service to fewer customers versus subsidizing a lower quality for more customers.

As discussed above, Consumer Advocates do not believe that the time is ripe to make such a commitment to auction design. It is not clear what will happen with the CAF Phase II fund

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³²⁷ Sorana, V. "Auctions for Universal Service Subsidies," *mimeo*, November 24, 1998, p. 18 (emphasis in the original).

³²⁸ Notice, at para. 1283.

following the implementation of the "offers" to the price cap ILECs. The Commission should revisit the relationship between the orphaned areas associated with the CAF Phase II and the RAF areas after it has more information. Furthermore, spreading the impact of satellite services at this point is ill-advised, as it is not clear what future satellite services will be capable of, or how reliable they will be. What is clear from this vantage point is that the current generation of satellite service offerings are decidedly inferior, and are much more costly, than existing fixed terrestrial options.

Within the context of the introduction of subjective factors into the bid evaluation process, weighting the service quality differences, as discussed in the Notice, would certainly be necessary to compare bids, but the dimensions of service quality are more complex than the standard performance characteristics such as upload and download speeds, latency, and monthly download limits, which certainly are likely to have substantial differences across satellite and terrestrial services. Unlike terrestrial broadband options, large-scale service outages could result from problems with a single satellite. How the Commission would weight this disadvantage of satellite offerings is even more complex, but it would be reasonable to consider this factor in the overall evaluation of service quality. Placing an unduly large portion of the Commission's broadband deployment objective "eggs" into the satellite basket may not be reasonable policy.

4. RAF RFP Proposal

The Notice also indicates that the potential for an RFP approach to the CAF's RAF would be considered, potentially modeling the process after the RUS-BIP program. NASUCA has previously advocated that an RFP approach – a procurement auction – would be much better

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³²⁹ Notice, at para. 1290.

suited than a standard auction approach,³³⁰ and Consumer Advocates continue to believe that such an approach is reasonable. After dividing the areas into those that are "very high cost," and those that are not, the Commission should use a procurement process to award contracts for each unserved area. Consumer Advocates recommend that the bidding process be conduced in accordance with the regulations set forth in 48 CFR Subpart 15.2. Section 15.203(a) authorizes the use of RFPs for negotiated acquisitions, and the RFP is the vehicle used to communicate the government's requirements to prospective service providers. The Commission should request technical and cost proposals from potential service providers and make an award based upon the best value to the government based upon technical and cost factors.

5. Reasonably Comparable Rates

The Notice requests comment on how to implement the statutory "reasonably comparable" provisions with regard to rates in urban and rural areas. In the context of an auction, the issue of rates also takes on importance from the standpoint that bids for support must also standardize rates, otherwise, interpreting bids will be next to impossible. A low bid for support that includes a "high" service price is substantially different from a bid that is somewhat higher but includes a "low" service price. Unless the Commission specifies an affordable price, then determining the winning bid will be less than tractable, and could result in support being directed at the provision of unaffordable services. Further complicating the pricing issue is the fact that the mobility fund will support both voice and data services, and that the Notice requires that standalone voice service must be offered by any Mobility Fund support recipient. Given the importance of pricing issues in the context of an auction, the Commission must be more

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³³⁰ NASUCA's April 18, 2011 Comments, p. 84.

³³¹ Notice, at para. 1141.

specific than is allowed by the "two standard deviation" approach that is adopted for voice services. 332

With regard to pricing of broadband services, the Notice asks whether unregulated broadband prices "show relatively small variations, making another methodology more appropriate?" With regard to broadband prices, greater care must be exercised in the interpretation, and it makes sense to evaluate prices on both a "total list price" and per-megabit basis, as evident from the table on the next page.

³³² Order, at para. 84.

³³³ Notice, at para. 1026.

TABLE 3

Advertised "Up to" Broadband Download Speeds and Prices				
	Advertised "Up to"			
Company	Download Speed (Mbps)	Price	\$/Mbps	
Comcast	105	\$199.95	\$1.90	
Cox	55	\$99.99	\$1.82	
Comcast	50	\$116.95	\$2.34	
Verizon FiOS	50	\$139.95	\$2.80	
Cox	31	\$62.99	\$2.03	
Comcast	25	\$69.95	\$2.80	
Verizon FiOS	25	\$69.95	\$2.80	
Time Warner	20	\$49.95	\$2.50	
Comcast	15	\$59.95	\$4.00	
Time Warner	15	\$39.95	\$2.66	
Cox	15	\$47.99	\$3.20	
Verizon FiOS	15	\$49.95	\$3.33	
Time Warner	10	\$29.95	\$3.00	
AT&T U-verse Internet Elite-D	6	\$24.95	\$4.16	
Comcast	6	\$49.95	\$8.33	
AT&T U-verse Internet Pro-D	3	\$19.95	\$6.65	
Cox	3	\$35.99	\$12.00	
Comcast	1.5	\$41.95	\$27.97	
CenturyLink	1.5	\$19.95	\$13.30	
AT&T Express	1.5	\$19.95	\$13.30	
Verizon DSL	1	\$14.95	\$14.95	
Time Warner	0.768	\$19.95	\$25.98	

For example, Table 3 shows advertised data speeds and prices available in urban areas from a variety of carriers. While Consumer Advocates have not undertaken an exhaustive survey, the data in Table 3 show that there is substantial variation in broadband prices. For example, Comcast, AT&T, and CenturyLink each have an "up to" 1.5 Mbps plan. Comcast's prices are more than double AT&T and CenturyLink's. Similarly, Comcast, Verizon FiOS, Time Warner, and Cox each have "up to" 15 Mbps plans, and these plan price show substantial variation—with

the Comcast plan priced 50% higher than the Time Warner plan. While Consumer Advocates found no offers at the 4 Mbps download speed specified in the Order, prices in the 3 to 6 Mbps range show a range from \$19.95 to \$49.95, which again suggests substantial variation.

IV. CONCLUSION

As discussed at the outset of these comments, Consumer Advocates have grave doubts as to the legality and reasonableness of many aspect of the FCC's Order. Despite these doubts, Consumer Advocates have attempted to respond to the issues raised for comment in the Notice – despite the fact that the Notice is based on the flawed Order. On behalf of the consumers who are supposed to benefit from the FCC's decisions – who are also those who will have to pay for those decisions – Consumer Advocates commend these comments to the FCC's attention.

Respectfully submitted,

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Attachment A

Illustrative Wireline Merger/Sale Broadband Deployment Commitments

Introduction

Broadband funds should be used efficiently and should not duplicate either (a) market place incentives or (b) pre-existing regulatory obligations and industry commitments. The FCC cannot readily predict when and where marketplace incentives will lead to broadband deployment other than by examining estimates of costs and associated revenues of such theoretical deployment, a process that may be informed by the in-progress broadband cost model. However, the FCC can and should gather comprehensive data regarding carriers' pre-existing regulatory obligations, and public monies (e.g., NTIA grants and state broadband funds), and commitments. Toward that end, Consumer Advocates urge the FCC to require carriers to provide detailed geocoded information regarding the areas in which they are deploying broadband service as a result of regulatory obligations, commitments, and public monies. The information should also include data on the broadband speeds being delivered to consumers. CAF funds are limited and it is essential to prevent duplicative efforts and double-funding of broadband deployment.

This attachment provides a preliminary illustrative overview of some of the broadband commitments that have been associated with the FCC's approvals of mergers and spin-offs of ILECs.

CenturyLink/Qwest:³³⁴

FCC BROADBAND BUILD-OUT METRICS	Current% LUs	%LUs 3 Years from Merger Closing Date	%LUs 5 Years from Merger Closing Date	% LUs 7 Years From Merger Closing Date
Living Units with Access to at Least 1.5 Mbps Downstream from the Applicants	87.0%	88.5%	90.0%	92.7%
Living Units with Access to at Least 5 Mbps Downstream from the Applicants	53.0%	62.0%	68.0%	78.8%

³³⁴ In the Matter of Applications filed by Qwest Communications International Inc. and CenturyTel, Inc. d/b/a CenturyLink for Consent to Transfer Control, WC Docket No. 10-110, Memorandum Opinion and Order, rel. March 18, 2011, at Appendix C: CenturyLink Commitments.

Living Units with Access to at Least 12 Mbps Downstream from the Applicants	28.8%	35.0%	42.0%	60.0%
Living Units with Access to at Least 40 Mbps Downstream from the Applicants	8.3%	15.0%	20.0%	30.0%

These commitments are specific to legacy Qwest service territory.

Verizon/Frontier: 335

Within the areas being transferred to Frontier from Verizon, the following commitments apply:

3 Mbps (download)	4 Mbps (download)
• to at least 72% of housing units ² by the end of 2011;	N/A
• to at least 80% of housing units by the end of 2012;	• to at least 70% of housing units by the end of 2012;
• to at least 85% of housing units by the end of 2013;	• to at least 75% of housing units by the end of 2013;
N/A	• to at least 80% of housing units by the end of 2014;
N/A	• to at least 85% of housing units by the end of 2015.

CenturyTel/Embarq: 336

"The merged company will offer retail broadband Internet access service to 100 percent of its broadband eligible access lines within three years of the Transaction Closing Date." 337

• "To meet this commitment the merged company will make available retail broadband Internet access service with a download speed of 768 kbps to 90 percent of its broadband eligible access lines using wireline technologies within three years of the Transaction Closing Date. The merged company will make

³³⁵ In the Matter of Applications Filed by Frontier Communications Corporation and Verizon Communications Inc. for Assignment or Transfer of Control, WC Docket No. 09-95, Memorandum Opinion and Order, rel. May 21, 2010, at Appendix C: Frontier Conditions.

³³⁶ In the Matter of Applications Filed for the Transfer of Control of Embarq Corporation to CenturyTel, Inc., WC Docket No. 08-238, Memorandum Opinion and Order, June 25, 2009, at Appendix C: Conditions.

³³⁷ *Id.*, at Appendix C, page 31.

- available retail broadband Internet access service in accordance with the FCC's current definition of broadband to the remaining broadband eligible access lines using alternative technologies and operating arrangements, including but not limited to satellite and terrestrial wireless broadband technologies."
- "In addition, the merged company will make available retail broadband Internet access service with a download speed of (1) 1.5 Mbps to 87% of the broadband eligible access lines within two years of the Transaction Closing Date and (2) 3 Mbps to 75% of broadband eligible access lines within one year of the Transaction Closing Date, 78% of broadband eligible lines within two years of the Transaction Closing Date, and 80% of broadband eligible lines within three years of the Transaction Closing Date."

Verizon/FairPoint: 338

"We find that the Applicants have met their burden of demonstrating that the proposed transaction will result in public interest benefits. As the Applicants argue, Verizon's strategic opportunities have required it to prioritize demands on its capital, and it has chosen to divest the exchanges in order to address competing needs. In contrast, FairPoint presents a plan that is likely to result in accelerated broadband deployment in the three-state region.

We are persuaded that FairPoint's proposed plan for broadband deployment is likely to provide greater benefits to consumers than they would receive absent the transaction. Verizon stopped its capital-intensive New Hampshire FiOS project in June of 2006. FairPoint initially proposed to spend \$52.55 million on broadband expansion in the three-state region by 2010, including \$18.55 million in Vermont, \$16.45 million in New Hampshire, and \$17.55 million in Maine. FairPoint anticipated that over 128,000 customers in the three states that do not currently have broadband access would benefit from these investments. FairPoint stated that such expenditures will allow it to make broadband addressable to 88 percent of lines in Vermont within 34 months of the completed transaction, and 83 percent of lines in New Hampshire and 83 percent of lines in Maine within 24 months of the completed transaction. Further, FairPoint stated its plans to increase broadband addressability eventually to at least the same level (92 percent) it has achieved in its existing service territory in these three states.

The Commission now understands that FairPoint has agreed, before the Maine commission, "to substantially increase its proposed broadband investment to reach 90% addressability in Maine, and to maintain certain price levels and service offerings." To do so, during the five years following the closing of the transaction, Verizon and FairPoint collectively agreed to spend \$69.55 million in implementing this broadband commitment. The Commission further understands that, in the stipulation before the Maine commission, FairPoint

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³³⁸ In the Matter of Applications Filed for the Transfer of Certain Spectrum Licenses and Section 214 Authorizations in the States of Maine, New Hampshire, and Vermont from Verizon Communications Inc. and its Subsidiaries to FairPoint Communications, Inc., WC Docket No. 07-22, Memorandum Opinion and Order, rel. January 9, 2008.

committed "to reduce its dividend level by 35% and . . . us[e] the higher of 90% of annual Free Cash Flow or \$35 million per year to further reduce its debt over time." In addition, prior to the closing of the transaction, Verizon agreed to increase the working capital of the divested company by \$235.5 million, enabling FairPoint to incur less debt and facilitate investment.

Accordingly, we believe that FairPoint's plan for broadband deployment is likely to accelerate availability of broadband Internet access service to customers in the three states, and we reject commenters' arguments that the transaction will produce no public benefits."³³⁹

AT&T/BellSouth:³⁴⁰

"By December 31, 2007, AT&T/BellSouth will offer broadband Internet access service (*i.e.*, Internet access service at speeds in excess of 200 kbps in at least one direction) to 100 percent of the residential living units in the AT&T/BellSouth in-region territory. To meet this commitment, AT&T/BellSouth will offer broadband Internet access services to at least 85 percent of such living units using wireline technologies (the "Wireline Buildout Area"). AT&T/BellSouth will make available broadband Internet access service to the remaining living units using alternative technologies and operating arrangements, including but not limited to satellite and Wi-Max fixed wireless technologies. AT&T/BellSouth further commits that at least 30 percent of the incremental deployment after the Merger Closing Date necessary to achieve the Wireline Buildout Area commitment will be to rural areas or low income living units."

³³⁹ Id., at paras, 29-32.

³⁴⁰ In the Matter of AT&T Inc. and BellSouth Corporation Application for Transfer of Control, WC Docket No. 06-74, Memorandum Opinion and Order, rel. March 26, 2007, at Appendix F - Conditions.