

GVNW Consulting, Inc.  
Comments in GN Docket Nos. 09-47, 09-51, 09-137  
NBP Notice # 19  
December 7, 2009

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

In the Matter of	)	
	)	
International Comparison and Consumer	)	GN Docket No. 09-47
Survey Requirements in the Broadband	)	
Data Improvement Act	)	
	)	
A National Broadband Plan for	)	
Our Future	)	GN Docket No. 09-51
	)	
Inquiry Concerning the Deployment of	)	GN Docket No. 09-137
Advanced Telecommunications Capability	)	
to All Americans in a Reasonable and	)	
Timely Fashion, and Possible Steps to	)	
Accelerate Such Deployment Pursuant	)	
to Section 706 of the Telecommunications	)	
Act of 1996, as Amended by the Broadband	)	
Data Improvement Act	)	
	)	

**COMMENTS OF GVNW CONSULTING, INC.  
NBP PUBLIC NOTICE # 19**

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## **EXECUTIVE SUMMARY**

***Size of the Universal Service Fund.*** We respectfully submit that any changes to funding levels should not come at the expense of rural wireline carriers in high cost to serve areas. Wireline carriers presently serve as the backbone of the entire communications network. In this regard, the Commission must be cautious to recognize the interdependence that wireless carriers have on wireline networks. The mobility provider depends on the wireline provider in its call completion architecture. We encourage the Commission to avoid any unintended consequences that could produce a deleterative effect on the entire network.

***Contribution Methodology.*** At some point, we believe that the Commission will find it necessary for contributions to all Universal Service Fund programs, including any type of High Speed Broadband Fund, to be based on a combination of working telephone numbers and public network connections, including all broadband connections in service, regardless of technology.

***Transitioning the Current Universal Service High-Cost Support Mechanism to Support Advanced Broadband Deployment.*** The Commission must be careful to not disadvantage customers that do not presently, and may not ever, embrace the broadband paradigm. It seems that a flash-cut transition fails to meet any common sense public policy test. If the Commission decides to create a new Universal High Speed Broadband Fund, it would be necessary for such a fund to support the major components of providing high-speed broadband service – last-mile loop costs, middle-mile transport costs, and access to the Internet backbone. We further anticipate that such a plan would

support one fixed technology high-speed network provider in each rural service area. We also anticipate that the mechanism would allow for one mobile wireless provider in each area to be supported. We recommend that the support amounts be based on a demonstration of actual costs that exceed a qualifying threshold.

Universal service support from viable and sustainable federal programs is a necessity for rural areas to fully realize the promise of a broadband future. It is also the law. Section 254(b) (3) of the Telecommunications Act of 1996 requires that consumers in rural and high-cost to serve areas should have access to advanced services that are reasonably comparable in both price and quality to the services that are available in urban areas. There are benefits in a national broadband strategy of maximizing the number of broadband residents that will be included.

We respond emphatically that both capital and operational expenses should be included in any broadband support mechanism for rural wireline carriers.

One obvious factor that we recommend be considered is a demonstrated track record of providing communications services in a sustainable fashion. While some may criticize this as providing an advantage to incumbent providers, the plain fact of the matter is that broadband penetration must be sustained in order for the national broadband strategy to be considered a success. Especially in rural areas, there will be a challenge to provide broadband in a sustained fashion. The situations where only one business case can be made may best be served by the incumbent provider.

***Impact of Changes in Current Revenue Flows.*** The Commission should simply examine the data that has been in the record for at least the last decade. The Commission has previously recognized that the costs of rural carriers are higher than non-rural carriers. This was demonstrated empirically in the Rural Task Force's (RTF) White Paper 2. Rural carrier telecommunications networks necessitate investing large amounts of capital in inherently long-lived plant assets. These investments are possible when lenders have a reasonable certainty of debt repayment.

***Competitive Landscape.*** The Commission should bear in mind that not supporting a carrier of last resort network for rural carriers could have unintended consequences, including an inability to raise capital and evolve appropriate levels of service. Rural carrier telecommunications networks necessitate investing large amounts of capital in inherently long-lived plant assets. These investments are possible when lenders have a reasonable certainty of debt repayment and investors/stockholders/cooperative members are afforded an opportunity to receive a compensatory rate-of-return.

***High-Cost Funding Oversight.*** Few, if any parties, would argue against the need for effective oversight of universal service funding. However, recent Congressional correspondence has indicated there have been some issues surrounding the ongoing audits of the Universal Service Fund (USF). We encourage any improvements achieved in the review of current USF be applied to future broadband oversight.

***Lifeline/Linkup.*** The number of questions posed on the Lifeline/Linkup issue is indicative of the current and future importance of these types of programs.

## **INTRODUCTION AND BACKGROUND**

The purpose of these comments is to respond to the National Broadband Plan (NBP) Public Notice # 19 concerning a request for input on universal service and intercarrier compensation issues as a part of the development of a comprehensive national broadband plan by the Commission.

GVNW Consulting, Inc. (GVNW) is a management consulting firm that provides a wide variety of consulting services, including regulatory and advocacy support on issues such as universal service, intercarrier compensation reform, and strategic planning for communications carriers in rural America.

Rural wireline carriers stand ready to meet their portion of the broadband challenge. One of the key questions that this Commission is faced with is a simple one: “How much of this broadband cost will be recovered from carrier rates and how much will be left to be recovered from support mechanisms?” We respectfully submit that the solution set may be a bit different in rural, high cost to serve areas with low density that it will be in the heavily populated areas served by AT&T and Verizon.

Per the request in the Public Notice, we have organized these comments in the order of the questions posed in the Public Notice document. The Public Notice addresses the important question of how current and future broadband investment will be paid for. Several parties, including FCC Commissioners, have lamented where the United States ranks in terms of broadband penetration rates as compared to other countries, several of which are more densely populated. Key Congressional leaders have called for specific levels of capacity to be available in years such as 2010 and 2015, which would require considerable upgrades to current configurations.

## **SIZE OF THE UNIVERSAL SERVICE FUND**

The Public Notice poses questions in this section as to whether increases to one portion of universal service funding should come at the expense of other USF funding. We respectfully submit that any changes to funding levels should not come at the expense of rural wireline carriers in high cost to serve areas.

Wireline carriers presently serve as the backbone of the entire communications network. In this regard, the Commission must be cautious to recognize the interdependence that wireless carriers have on wireline networks. The mobility provider depends on the wireline provider in its call completion architecture. Current wireless, VoIP, and satellite networks require a connection to land line infrastructure to provide full functionality. This network reality is documented in *Wireless Needs Wires: The Vital Role of Rural Networks in Completing the Call*, published by the Foundation for Rural Service in March, 2006. This paper states in part:

*Without thoughtful consideration by policymakers of the challenges of providing wireless services in rural America, as well as the dependence of wireless services on wireline networks, portions of the nation are likely to remain underserved . . . Most importantly, one must recognize that without the underlying wireline network, wireless networks could not exist in their current form. In spite of this obvious fact, large wireless carriers and policymakers alike continue to pursue practices and policies that will in fact undermine the critical wireline network. While discussions on how to modify reciprocal compensation, access charges, and universal service continue, attention must be placed on ensuring these mechanisms are capable of maintaining the fiscal health of that wireline network.*

We encourage the Commission to avoid any unintended consequences that could produce a deleterative effect on the entire network.

## **CONTRIBUTION METHODOLOGY**

The Public Notice notes that numerous commenters have urged the Commission to modify the current methodology for assessing contributions to the universal service fund. Recommendations have included a numbers or connection-based methodology, an expanded revenue-based methodology, or some combination or permutation of the two methods.

The Commission must make a determination as to how best to provide a sustainable funding base<sup>1</sup> that will support the current universal service support mechanisms, and the likely transition to a new or revised mechanism in a broadband paradigm.

At some point, we believe that the Commission will find it necessary for contributions to all Universal Service Fund programs, including any type of High Speed Broadband Fund, to be based on a combination of working telephone numbers and public network connections, including all broadband connections in service, regardless of technology. OPASTCO discussed such an approach in its ex parte dated November 30, 2009.

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<sup>1</sup> We respectfully request the Commission fully understand the substantial cost of “winning the broadband metric contest” in the statistics currently being examined across countries. Very significant support will be needed in order for all rural customers to access 50 megabits at a comparable rate to an average customer in New York City.

**TRANSITIONING THE CURRENT UNIVERSAL SERVICE HIGH-COST SUPPORT MECHANISM TO SUPPORT ADVANCED BROADBAND DEPLOYMENT**

Commissioner Baker accurately portrayed the challenges policy makers face in dealing with the thorny issues of intercarrier compensation and universal service reform in her recent statement (November 23) airing on C-Span's "The Communicators" in observing that: "*it's impractical to think that we're going to solve universal service within the plan*" and referencing these twin issues as a "*decade-old problem*" that may hold the key to enabling successful broadband deployment. It is not time, however, to throw the incumbent providers "under the bus" in a desire to try something different simply for the sake of change. The Public Notice addresses some of the key issues on these topics, including but not limited to:

a) *Support mechanism transition issues are posed at i. with the discussion of what would be an appropriate transition plan and path to the new broadband fund.*

There is considerable debate about the appropriate transition from the current mechanisms to a potential new broadband fund. The Commission must be careful to not disadvantage customers that do not presently, and may not ever, embrace the broadband paradigm. It seems that a flash-cut transition fails to meet any common sense public policy test.

If the Commission decides to create a new Universal High Speed Broadband Fund, it would be necessary for such a fund to support the major components of providing high-speed broadband service – last-mile loop costs, middle-mile transport costs, and access to the Internet backbone. We further anticipate that such a plan would

support one fixed technology high-speed network provider in each rural service area. We also anticipate that the mechanism would allow for one mobile wireless provider in each area to be supported. We recommend that the support amounts<sup>2</sup> be based on a demonstration of actual costs that exceed a qualifying threshold.

In terms of the importance of broadband infrastructure to rural areas, we were encouraged to see some of the statements made by Commissioner Copps when he was serving as the Acting Chairman. In that role, Copps addressed some key issues in his recent Report on Rural Broadband Strategy<sup>3</sup>. In specific, we applaud the statement found at paragraph 82 where the issue of Scalability is discussed, and the report states in part:

*. . . As a consequence, we believe that networks deployed in rural areas should not merely be adequate for current bandwidth demands. Instead, they also should be readily upgradeable to meet bandwidth demands of the future. An international comparison suggests significant additional capacity may be necessary. . . . Bandwidth-intensive applications could very easily become the norm in the U.S. – even in rural areas. Technologies that cannot be upgraded easily could make Internet applications less than five years from now look like the dial-up downloads of today.*

We are optimistic that the full Commission shares such a forward-looking and much-needed vision of the future for rural service areas. For this to occur, support is prerequisite.

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<sup>2</sup> See, for example, OPASTCO's Universal Service in Rural America: A Congressional Mandate at Risk, January 2003, page viii: "High-cost universal service support is not a subsidy program for end-user customers. It is a cost recovery program designed to promote infrastructure investment in areas where it would not otherwise be feasible for carriers to provide quality services at rates that are affordable and reasonably comparable to urban areas."

<sup>3</sup> *Bringing Broadband to Rural America: Report on a Rural Broadband Strategy*, Acting Chairman Michael J. Copps, Federal Communications Commission, May 22, 2009 (Rural Broadband Strategy Report/Copps' Report).

Over the past decade, the Commission has relied on the important work of the Rural Task Force<sup>4</sup> to develop rational public policy that considered the needs of rural, high-cost-to-serve regions. With the substantial costs involved in deploying broadband to very rural territories, the question must be asked: “Will all areas be served, and if not, what cost is too high from a public policy perspective?” Some may argue that there are situations where providing very remote or isolated customers with robust wireline broadband services is not feasible from a dollars and cents perspective. We respectfully submit that the Commission should be cautious in settling to a standard in which large numbers of very rural residents are excluded from the broadband world. The public policy benefits of the “network effect” addressed in the section g. response should be carefully considered in the setting of a national broadband policy.

The Commission should consider as a part of its national broadband policy the differentiation it used in adopting the Rural Task Force rules for universal service. Simply stated, the prescription to keep communications in rural areas viable<sup>5</sup> is to continue the principles that serve as the foundation of the earlier Rural Task Force rules.

This was the conclusion reached by the Rural Task Force. Rural is still different in 2009, and will still be different in future years<sup>6</sup>. The rural difference is a valid

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<sup>4</sup> Appointed a decade ago, the Rural Task Force (RTF) was comprised of a cross-section of industry representatives and performed extensive empirical analysis prior to reaching a consensus, forming recommendations on universal service policy that were adopted nearly in their entirety by both the Joint Board and the FCC.

<sup>5</sup> Rural areas provide benefits to the entire society through the provision of agricultural, energy and recreational resources that are enjoyed by both urban and rural residents.

<sup>6</sup> In the RTF Report, the concept of the Law of Large Numbers was discussed, explaining the phenomena that with a large number of offices, urban carriers are able to flatten out any discrepancies. In the rural arena, the corollary of the 3D rule (Drastically Different Denominators) is applicable. With fewer customers in the equation, the mathematics is different for rural carriers.

consideration in developing broadband public policy in 2009<sup>7</sup>. Any viable broadband policy for rural carriers must reflect the diversity of cost between rural and non-rural carriers, and among the subset of rural carriers.

In considering the initial national broadband policy, it is important to note that much of the success to date in rural areas has been based on the foundational cornerstone of federal universal service support. While the recent paper issued by Free Press<sup>8</sup> is but the latest in the recent series of pundits that seek headlines from conducting various forms of “universal service bashing,” the Universal Service Joint Board has recognized the successes<sup>9</sup> of current programs by stating that while universal service “may need adjustments, we recognize its effectiveness in maintaining an essential network for [providers of last resort] POLRs and in deploying broadband.”

We trust the Commission will continue to see the transparency in the arguments of parties such as Free Press. Universal service support from viable and sustainable federal programs is a necessity for rural areas to fully realize the promise of a broadband future. It is also the law. Section 254(b) (3) of the Telecommunications Act of 1996 requires that consumers in rural and high-cost to serve areas<sup>10</sup> should have access to advanced services that are reasonably comparable in both price and quality to the services that are available in urban areas. There are benefits in a national broadband strategy of maximizing the number of broadband residents that will be included.

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<sup>7</sup> Rural carriers exist because larger carriers chose not to serve the areas that were most costly to serve. The recent large carrier sales of entire states prove this is still the case in 2009.

<sup>8</sup> *Dismantling Digital Deregulation: Toward a National Broadband Strategy*, Free Press, May, 2009.

<sup>9</sup> Recommended Decision, 22 FCC Rcd 20486, paragraph 30.

<sup>10</sup> As an example, NECA traffic sensitive pool participants serve 3.3 % of lines, but provide service to approximately 40 % of the United States geography.

b. *Question b. inquires about how to restructure a support mechanism and what should be the impact of losing a customer to a competitor.*

In golf, it is essential to make good shots from tee to green. A good drive and a good putt are wasted without a good middle shot from the fairway. Thus is also the case with respect to broadband delivery. The portion of the network in the middle is as important as the facilities on either end. This “middle mile” or rural transport cost issue was addressed in both the Coppins’ Report and was mentioned previously by the Joint Board.

In the Coppins’ Report, paragraph 114 observes that many rural broadband networks are located considerable distances from Internet backbone nodes, creating a situation where the transport costs are “*significantly higher than for networks in other areas.*” In the Joint Board’s Recommended Decision two years ago, the Joint Board observed that support for such transport costs does not exist, and that it is harmful from a public policy perspective to ignore such costs. We respectfully suggest that the time is at hand to stop ignoring these costs that will impede the transition to broadband for rural areas.

We respectfully request that as the Commission formulates its national broadband strategy that the circumstances related to meeting the needs of customers in high cost to serve rural areas are carefully evaluated and factored into the final decisions. In this regard, the Commission should be careful to ensure that at least one complete network is available to meet the needs of all customers. A complete rural broadband network should be defined as extending from customer to the Internet backbone, which would include: last mile (e.g., loop facilities); second mile defined as from the serving wire center

through the access service connection point to the ISP interface; and middle mile facilities from the ISP to the connection with the Internet backbone.

*c. This question asks about the size of any broadband funding mechanism if a modeling approach were to be employed*

In the initiation of a recent docket, Commissioner McDowell offered a statement that is relevant to this aspect of this proceeding. In his statement accompanying the Notice of Inquiry in WC Docket No. 07-52 (FCC 07-31), the Commissioner states in part: *“But we also must resist the temptation to impose regulations that are based merely on theory.”* Cost models that yield accurate and representative results remain costly to build and more importantly maintain. A model must be developed with a requisite level of sophistication so that it is capable of handling the vastly different circumstances between urban and rural service areas. This includes tasks such as properly identifying relevant factors, understanding the relationships amongst and between each factor, and then obtaining sufficient data to appropriately model the network configuration and cost. This type of work is time consuming and time sensitive, as the network continues to evolve. With respect to cost modeling, the challenges are exacerbated by the fact that the advances of the last decade require a reexamination of just what is “the” forward-looking technology that should be modeled.

*d) Question d. addresses what should be supported – capital expenditures or operating expenses, or both?*

In an August 12, 2008 filing, the National Telecommunications Cooperative Association (NTCA) concisely captured the current rural challenges:

*“With access revenues shrinking, uncertain universal service reform pending, middle-mile costs increasing, and broadband infrastructure costs<sup>11</sup> soaring, rural service providers and rural consumers are entering a perfect storm. In order to avert this impending danger, the Commission must act quickly to stabilize<sup>12</sup> the federally regulated revenue streams that support rural [local exchange carrier] infrastructure currently used to deploy broadband, as well as provide voice service, to rural consumers.”*

In the introductory paragraph in this section of the Public Notice at d., the question is posed: ***“Should high-cost broadband funding be limited to supporting a direct one-time reimbursement for new capital expenditures, or should it support both capital and operational expenses?”*** We respond emphatically that BOTH capital and operational expenses should be included in any broadband support mechanism for rural wireline carriers. Creating a sustainable rural broadband network may be analogized to purchasing a car<sup>13</sup>. If you stop spending money after the purchase and ignore the maintenance, the car will soon cease to be operational. Without oil, the engine will seize

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<sup>11</sup> We add the following observation: Rural carriers stand ready to meet their portion of the broadband challenge. The question that this and future Commissions are faced with is a simple one: “How much of this broadband cost will be recovered from carrier rates and how much will be left to be recovered from support mechanisms?” We respectfully submit that the solution set may be a bit different in rural, high cost to serve areas with low density that it will be in the heavily populated areas served by AT&T and Verizon.

<sup>12</sup> At the time of that filing, NTCA filed a plan with the Commission that was tailored to address the interstate Universal Service Fund and intercarrier compensation needs of rural consumers served by rural local exchange carriers. This proposal argues that as more traffic moves to voice-over-IP and other IP-based applications, more costs should be assigned to the interstate jurisdiction and recovered through the federal universal service mechanism, since rural carriers will not be able to recover the difference through a SLC increase as is the case for many price cap carriers.

<sup>13</sup> We believe the car analogy is appropriate, given earlier debates about the information superhighway as well as recent discussions about the road or path to broadband.

up. Without water, the engine will overheat. Without maintaining the headlights and turn signals, public safety<sup>14</sup> is endangered.

In an attempt to be responsive to the explicit data requests found throughout the Public Notice, we offer some wireline industry price-out data that illustrates the importance of operating expenses in the current HCL mechanism in Appendix A.

Appendix A demonstrates for the cost based carriers in the NECA high-cost loop support algorithm how expenses impact the calculated loop cost. The cost reimbursement method used in the administration of the High Cost Loop Fund includes both a return on net investment and an allocation of expenses based on the direct investment. To illustrate the importance of the expense component of the support mechanism, we have developed the expense as a percentage of direct loop investment from the data submitted by NECA to the Commission on September 30, 2009 in compliance with 47 C.F.R. §36.613 of the Commission's rules. The calculations were performed by inputting the data filed for each cost company at the "data line" level. We then programmed in the first 22 algorithms as described in NECA's filing. Algorithms 13 through 22 developed the loop portion of the expenses used in the development of the loop cost. One exception was made for this initial price out. The corporate operations expense was used as reported in the data line. In the actual development of loop cost there could be modifications for some companies if their corporate expense exceeded the cap. The price out shows that the average loop expense per dollar of direct loop investment was \$.16, or 16%. The average masks the more significant impact that the

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<sup>14</sup> There are certainly public safety issues surrounding discussion of a rural broadband infrastructure and we defer those to separate public notices or ex parte presentations.

Exhibit shows for many of the smaller, more remote carriers. Percentages such as 42% for Mukluk Telephone Company in Alaska, 58% for Adak Telephone Utility in Alaska, and 53% for Chugwater Telephone in Wyoming are indicative of how important the expense component of the HCL is for certain rural carriers.

The spreadsheet used to complete Exhibit A is included with this filing.

*f) This question asks whether the Commission should take into account monies received from NTIA and RUS grants, which implicitly addresses the issue of sustainability.*

One obvious factor that we recommend be considered is a demonstrated track record of providing communications services in a sustainable fashion. While some may criticize this as providing an advantage to incumbent providers, the plain fact of the matter is that broadband penetration must be sustained in order for the national broadband strategy to be considered a success. Especially in rural areas, there will be a challenge to provide broadband in a sustained fashion. The situations where only one business case can be made may best be served by the incumbent provider.

In addition, we would encourage that a careful review be given to proposals from the large national carriers that to this point have ignored substantial portions of their service territory. We believe that an additional burden of proof<sup>15</sup> is required for these providers to demonstrate that broadband is “sustainable” when to this point they have virtually ignored deploying the necessary facilities.

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<sup>15</sup> Recent statements that such an approach will serve 95% of the customers ignore an important 5% of customers that are deserving of broadband infrastructure. To place this in context, the rural carriers that participate in NECA’s traffic sensitive pool serve 3.3% of the customers over a geographical footprint that encompasses roughly 40% of the country.

g) *Issues surrounding narrowly targeting support require a discussion of the “network effect”*

A rural customer being accessible on the broadband network should be one of the foundational aspects of federal universal service policy going forward. This concept is commonly referred to as “the network effect.” As explained in the Copps’ report in footnote 297, “*this ‘network effect’ is a reason why the Commission has an explicit universal service program to ensure that people are connected to the telephone network.*” The footnote 297 further states that everything else being equal, a customer is more likely to choose a network that serves 80% of the population, instead on one that serves 20% of the population, because the larger network is more likely to serve more people that the customer may want to call.

h. *Capping issues*

Each party that participates in the universal service support system believes that capping impedes their ability to reach the highest cost to serve customers. If the Commission decides to continue to cap certain support funding, care should be exercised to not penalize<sup>16</sup> recipients in the highest cost to serve areas of the country.

i. *Possible changes to ETC requirements*

We expect that speed issues<sup>17</sup> will emerge as important with respect to broadband provision requirements. All fixed technology providers receiving support through a new

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<sup>16</sup> An alternative that could ameliorate the pressure to cap such funds would be to require broadband support to flow to common carriers that have open network obligations and to do so on a study area basis, so as to support an entire viable network as defined on pages 13-14 of these comments.

<sup>17</sup> See, for example, at page 12 of testimony for November 17, 2009 hearing before the United States House of Representatives, Subcommittee on Communications, Technology and the Internet of the Committee on

broadband fund would likely have to commit to offering broadband throughout their service area at speeds that meet some minimum level<sup>18</sup> metric for broadband speed.

In addition, we would expect that end-user rates would need to be maintained that are reasonably comparable to the national average rate. Support recipients would also be required to make their network available to other retail providers, as the Commission has expressed a strong preference in this regard. Carriers should also expect to adhere to quality of service oversight.

### **IMPACT OF CHANGES IN CURRENT REVENUE FLOWS**

The preamble to question 4 in the Public Notice references commenters such as OPASTCO and NTCA that have asserted that any significant reductions in current levels of universal service high-cost support and/or intercarrier compensation would jeopardize the ability of rural carriers to continue to serve customers and advance the deployment of next generation broadband-capable networks.

*a. What factual analyses should the Commission undertake to test the validity of such arguments?*

The Commission should simply examine the data that has been in the record for at least the last decade. The Commission has previously recognized that the costs of rural carriers are higher than non-rural carriers. This was demonstrated empirically in the

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Energy and Commerce, by Ray Baum, Commissioner of the Oregon Public Utility Commission, on behalf of the National Association of Regulatory Utility Commissioners (NARUC). Mr. Baum suggested that the target speeds should be 20-50 mbs for anchor institutions and 3-5 mbs for residential customers.

<sup>18</sup> We recognize that the Commission has raised concerns as to whether advertised speeds are realized speeds and acknowledge that this issue has a major impact to this type of a recommendation. See, for example, September 29, 2009 FCC status report on NBP at pages 23, 26-27. In addition, if everyone has to “commit to speeds at the national average,” the average will have to increase since no one will be able to offset those that offer speeds above the national average.

Rural Task Force's (RTF) White Paper 2,<sup>19</sup> and this research was corroborated in NECA's *Trends in Telecommunications Cost Recovery: The Impact on Rural America* report released in October, 2002.

In *The Rural Difference*, the Rural Task Force quantitatively detailed key differences between urban and rural carriers, including but not limited to differences in costs for switching capacity and various expenses and overheads that were driven by differences in the rate calculation denominator.

Rural carrier telecommunications networks necessitate investing large amounts of capital in inherently long-lived plant assets. These investments are possible when lenders have a reasonable certainty of debt repayment<sup>20</sup> and investors/stockholders/cooperative members are afforded an opportunity to receive a compensatory rate-of-return.

The unrecovered embedded costs of investment in the rural carriers' network facilities are real costs that will continue to be borne by the rural carriers. If carriers are not permitted to recover these costs, such actions would ultimately be deemed confiscatory and subject to review under the Takings Clause. Commission rules as found at 47 C.F.R. Section 65.1-65.830 require that a rural rate-of-return carrier be permitted the opportunity to earn an authorized rate of return on investment allocated to interstate services.

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<sup>19</sup> "The Rural Difference", Rural Task Force White Paper 2, released January 2000.

<sup>20</sup> Conversely, lenders available to rural carriers will be unwilling to provide new capital if there is significant uncertainty regarding the ability to meet principal and interest obligations.

h. *Intercarrier compensation issues*

If the Commission decides to reduce current intercarrier compensation levels, we recommend the Commission adopt a Broadband Sustainability Mechanism (BSM). The establishment of the BSM would allow rural rate of return (RoR) ILECs to fully recover lost intercarrier revenues that are not otherwise recovered through increased SLCs. If rural carriers are not permitted to recover all of the lost revenue from the lowering of intercarrier rates, investment in infrastructure and, in particular, the continued deployment of advanced services, would slow considerably. Thus, the BSM is essential for rural RoR ILECs to meet the FCC's and Congress's goal of ubiquitous broadband availability. The Commission should therefore adopt it.

## **COMPETITIVE LANDSCAPE**

Another relevant infrastructure issue is highlighted at footnote 176 of the Rural Broadband Strategy Report:

*"...The lack of middle-mile infrastructure is one of the greatest obstacles to building sustainable rural broadband networks. Many middle-mile facilities were originally built by telephone and cable companies for ordinary telecommunications or cable television services. Rural communities are often still reliant upon these antiquated copper telephone and cable infrastructures, which lack the capabilities to deliver high-speed, broadband access."*

We respectfully request that the Commission carefully consider the "middle-mile" issue. This is especially important since the service that customers ultimately receive will only be as sound as the weakest part of the entire network. Many rural carriers are located a considerable distance from the nearest Internet peering point.

Questions a-h deal with Carrier of Last Resort (COLR) issues. We believe that COLR is still relevant in the broadband world. The ability to share increasing amounts of information, at greater and greater speeds, increases productivity, facilitates interstate commerce, and helps drive innovation. One of the reasons that universal service is working today is that virtually all customers are accounted for within some eligible carrier's service territory. These "carriers of last resort" (COLR) stand ready to serve even the most remote and isolated customers. But, this universally available service comes with a cost. Specifically for rural carriers, in a rate-of-return regulatory environment, the overarching principle that the Commission should adhere to is that rate-of-return carriers are entitled, as a matter of law, to a full recovery of their costs in providing interstate services.

Historically, the "carrier of last resort" (COLR) designation has provided a reasonable assurance that customers in remote regions of the country will have access to communications services. An important part of the COLR package has been the availability of universal service support.

The Commission should bear in mind that not supporting a carrier of last resort network for rural carriers could have unintended consequences, including an inability to raise capital and evolve appropriate levels of service. Rural carrier telecommunications networks necessitate investing large amounts of capital in inherently long-lived plant assets. These investments are possible when lenders have a reasonable certainty of debt repayment and investors/stockholders/cooperative members are afforded an opportunity to receive a compensatory rate-of-return. Public policies that do not support network development create uncertainty and would certainly not provide sufficient incentive for

efficient, long-term investment strategies that are prerequisite to infrastructure deployment in low density, high cost to serve areas of the country.

At question g. in this section, the Public Notice asks whether states should permit carriers to satisfy their COLR obligations using VoIP. Prerequisite to that determination should be a resolution of key outstanding VoIP issues. Numerous parties have documented this dilemma, including the NECA and four California carriers (Foresthill, Kerman, Sierra and Volcano) in an ex parte in WC Docket No. 04-36 and No. 01-92, dated May 22, 2008. In this ex parte, the filing entities indicate that interconnected VoIP providers are terminating traffic on the PSTN at a growing rate, and that these providers refuse to pay terminating access charges claiming that this is exempt VoIP traffic. The ex parte cited a forecast of projected VoIP revenue of \$11 Billion by the year 2011. The ex parte stated that the 10 rural California ILECs surveyed for the filing expect to lose over \$1 million by the end of that year if current trends continued. The ex parte offered that the ability to maintain and improve rural networks requires sustained revenue streams, including payments from other carriers that terminate traffic on their facilities. The issue of carriers not paying for their usage of the public switched telephone network<sup>21</sup> will continue to pose thorny problems for providers and regulators alike, absent proactive Commission attention.

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<sup>21</sup> There are various estimates those activities such as peer-to-peer networking involves 10-15% of customers that are utilizing as much as 85% of available bandwidth. Providing capacity requires capital investment on the part of carriers. The Commission will, in our opinion, be required to find a balance in order to mitigate network management issues.

## **HIGH-COST FUNDING OVERSIGHT**

Few, if any parties, would argue against the need for effective oversight of universal service funding. However, recent Congressional correspondence has indicated there have been some issues surrounding the ongoing audits of the Universal Service Fund (USF) that are being conducted by the Universal Service Administrative Company (USAC) at the direction of the Commission's Office of the Inspector General (OIG).

A vigorous debate occurred on these issues last year. As noted at page 2 of the Stupak/Terry letter<sup>22</sup> dated October 6, 2008: "*Again, we do not question the need for audits. In fact, our local telecom providers are confident that their compliance with federal rules is exemplary. However, the manner in which they are being executed is causing unnecessary burdens for USF, telecommunications providers, and most importantly rural consumers.*"

This debate about proper USF oversight continues in 2009. For example, on September 11, 2009, Senator Jeff Merkley of Oregon sent a letter to the Federal Communications Commission on the issue of USF oversight. As stated in Senator Merkley's letter:

*I ask that in determining the future of USF audits, the Commission take into consideration the concerns of rural telecommunications providers. . . While I support the use of audits to ensure appropriate use of USF funds, I have heard from rural telecommunications providers in Oregon that the audit process can create undue hardship for their business and customers. I have also heard concerns that some of the auditors lack experience and knowledge of the telecommunications industry, making it difficult for the auditor to conduct a full and fair review of the organization as they struggle to discern the difference between standard industry practices and inappropriate actions of a company.*

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<sup>22</sup> Letter to Federal Communications Commission Chairman Kevin Martin from Representative Bart Stupak and Representative Lee Terry, dated October 6, 2008, which was also signed by an additional 44 representatives (Stupak/Terry letter). This represents over 10% of the House of Representatives.

We were pleased to see in Chairman Genachowski's response to Senator Merkley on November 16 that the Chairman stated in part:

*We are aware that recent audits of beneficiaries have at times been complicated by miscommunications between the auditors and the beneficiaries and that the audit findings may not have always provided meaningful results. The FCC is seeking to remedy these concerns and to establish a USF audit program that best meets the FCC's oversight needs and incorporates lesson learned from previous audits.*

We are hopeful that the lessons learned will carry forward into the requisite broadband program oversight and would respectfully request that any improvements achieved in the review of current USF be applied to broadband oversight.

#### **LIFELINE/LINKUP**

The number of questions posed on the Lifeline/Linkup issue is indicative of the current and future importance of these types of programs. This may be due in part to the fact that the American Recovery and Reinvestment Act of 2009 directs the Commission to develop strategies for achieving affordable broadband services and maximizing the utilization of deployed broadband infrastructure. Efforts to expand these low income programs could be instrumental toward achieving both of those objectives.

The ability for low-income citizens to access affordable broadband services may also assist in achieving other goals related to education, public health, and public safety.

a. This question asks how any devices necessary for a low-income broadband program should be supported and question f. asks about cooperation with state programs.

We believe that there should be coordination with state programs and that each state should be involved in the funding and administration of such a program.

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States will have the ability to best coordinate these types of programs with existing programs that are designed to provide access to computers for low-income end users, without subtracting from the important funds needed for network support.

Respectfully submitted,

*Submitted via ECFS*

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