

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

In the Matter of	)	
	)	
International Comparison and Consumer Survey Requirements in the Broadband Data Improvement Act	)	GN Docket No. 09-47
	)	
A National Broadband Plan for Our Future	)	GN Docket No. 09-51
	)	
Inquiry Concerning the Deployment of 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	)	GN Docket No. 09-137
	)	
	)	
TO: The Commission	)	

**COMMENTS – NBP PUBLIC NOTICE #19**

**WESTERN TELECOMMUNICATIONS ALLIANCE**

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Dated: December 7, 2009

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**SUMMARY**

The Western Telecommunications Alliance (“WTA”) believes that the great success story to date of the Universal Service Fund (“USF”) is the manner that its existing High Cost Fund (“HCF”) programs have encouraged and enabled rural local exchange carriers (“RLECs”) to upgrade their networks to deploy broadband-capable facilities and to offer broadband services to rural customers in the most difficult and expensive portions of the nation. WTA members have used federal high-cost support (which currently comprises approximately 30-to-40 percent of their regulated revenues) as well as interstate and intrastate access revenues (which currently comprise another approximate 30-to-40 percent of their regulated revenues) to deploy and extend their hybrid fiber-DSL “last mile” networks to offer broadband services to approximately 90 percent of their rural customers at speeds ranging from 516 kbps to 3 Mbps or more. However, the job is far from finished, and RLECs need predictable and sufficient federal high-cost support to continue making the infrastructure investments and operating expenditures necessary to give all of their rural customers access to broadband services that are reasonably comparable in amount, quality, speed and price to those available in urban areas.

WTA sees the ultimate National Broadband Network as a predominately fiber optic network that can be readily scalable to meet the Gigabit-level speeds that will soon be needed to accommodate the rapid evolution of broadband services. It has proposed that the Commission follow the proven Interstate Highway System framework in its National Broadband Plan, with particular emphasis upon: (a) the utilization and upgrade of existing wireline and wireless networks to extend broadband services as rapidly and efficiently as possible; and (b) the expansion and further upgrade of such networks in a flexible manner in accordance with changing broadband service needs and available financial resources.

WTA believes that RLEC networks and federal HCF support mechanisms have already proceeded far down the transition path to the broadband world. It proposes separate broadband high cost support mechanisms for: (1) RLECs and other small wireline carriers of last resort (“COLRs”); (2) RBOCs and other larger wireline COLRs; and (3) wireless and other carriers providing mobility and other complementary or supplementary broadband services.

Initially, the minimum size of the small wireline COLR mechanism should be at the same stable level of annual high cost support (\$2.4 billion) that has helped RLECs to make substantial progress deploying broadband facilities and services during the past five years. To the extent that the Commission requires broadband access to be extended to 100 percent of RLEC customers at an early date and/or requires existing RLEC broadband networks to be upgraded significantly to furnish faster minimum broadband speeds, the broadband support needs of RLECs will increase in response. In fact, even without express Commission requirements, RLECs will need to make substantial additional broadband investments and expenditures, and to receive substantial broadband high cost support, during coming years in order to furnish their rural customers with broadband facilities and services that are reasonably comparable in quality and price to those available in urban areas.

Among other things, the proposed broadband high cost mechanism for RLECS and other small wireline COLRs: (a) should be based upon actual costs; (b) should support above-average broadband maintenance and operating expenses as well as investment costs; (c) will not be able to rely significantly upon cash flows from non-profitable video, Internet access and toll resale ventures; and (d) should support rural broadband networks, and not take away the allocated “per-line” support of customers who change carriers or otherwise terminate service.

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**COMMENTS – NBP PUBLIC NOTICE #19**

The Western Telecommunications Alliance (“WTA”) submits its comments in response to the Commission’s Public Notice (*Comment Sought on the Role of the Universal Service Fund and Intercarrier Compensation in the National Broadband Plan*), GN Docket Nos. 09-47, 09-51 and 09-137, DA 09-2419, released November 13, 2009 (“*NBP Public Notice #19*”).

WTA’s rural telephone company members have been leaders in the prudent upgrade of their multiple-use networks to deploy the modern telecommunications plant capable of providing access to broadband services as well as to traditional voice services. In fact, **the** great success story of the federal Universal Service Fund (“USF”) program is the progress to date by WTA members and other small rural local exchange carriers (“RLECs”) in deploying broadband-capable facilities and offering broadband services to approximately 90 percent of the households in many of the nation’s most costly and most difficult-to-serve rural areas.

However, while RLECs have made substantial progress, their task of meeting the burgeoning demands by rural customers for broadband access at higher and higher speeds is far from over. They need to make major future infrastructure investments and operating expenditures to continue providing their rural customers with access to broadband services reasonably comparable in quality and price to the rapidly evolving and expanding broadband services available in urban areas.

During the future as in the past, RLEC broadband deployment will depend a great deal upon the sufficiency and predictability of the cost recovery that is currently provided in major part by federal High Cost Fund (“HCF”) support and by access charge revenues (interstate and intrastate). Whereas the mechanisms for distributing these dollars may change, eliminations or substantial reductions of the dollars themselves (which currently comprise over half of the revenue streams of most RLECs) not only will impair the ability of RLECs to keep pace with changing broadband developments and needs, but also will threaten the continuing viability of the network upon which customers are relying for increasing levels of broadband services.

## I

### **The Western Telecommunications Alliance**

The Western Telecommunications Alliance is a trade association that represents more than 250 RLECs that operate as Carriers of Last Resort (“COLRs”) within the twenty-four states located west of the Mississippi River, including Alaska and Hawaii.

The conspicuous characteristic of WTA’s RLEC members (as well as of the more than 1,000 RLECs nationwide) is that they are highly diverse, and not effectively subjected to general models or “one size fits all” rules. Most WTA members are small companies and cooperatives that were developed at separate times and under a variety of circumstances to serve differing

remote and sparsely populated rural areas that larger carriers did not want to serve because the per-customer costs of constructing, operating and maintaining rural networks were then (and remain today) much higher than those in urban and suburban America. The service areas of WTA members range from sparsely populated farming and ranching regions from the Canadian border to the Mexican border; to rugged and isolated mountain, desert, forest and mining areas; and to Native American reservations, Arctic villages and the Hawaiian Home Lands. Most WTA members serve fewer than 3,000 access lines in the aggregate, and fewer than 500 access lines per exchange.

WTA members have made considerable efforts to invest in and upgrade their “last mile” facilities (in the Rural West, these are more accurately characterized as “last 20-to-50 mile” facilities) to give their rural customers access to advanced services. The typical WTA member presently offers broadband service to more than 90 percent of its customers. The speeds of these predominately digital subscriber line (“DSL”) and hybrid fiber-DSL services generally range from 516 kilobits per second (“kbps”) to 3 or more megabits per second (“Mbps”). Many WTA members have been deploying fiber optic facilities further and further out into their distribution networks in order to extend the range of their DSL services, and some are beginning to offer fiber-to-the-home (“FTTH”) service as they construct “green field” facilities to serve new developments and as they replace degrading copper loops in existing service areas.

## II **Size of the Universal Service Fund**

The ultimate size of the USF, as well as the relative sizes of the HCF and other individual components thereof, will depend upon the composition, additional infrastructure requirements and costs of the National Broadband Plan that is ultimately adopted and implemented.

WTA envisions a high-capacity National Broadband Network that will be able to distribute existing, projected and yet-to-be-envisioned voice, data, video and other digital services<sup>1</sup> at speeds that are likely to reach the Gigabits per second (“Gbps”) level within the next decade. Since this will be a national network, it must be able to connect and serve all Americans wherever they may reside or work – that is, it must provide quality and reasonably comparable broadband facilities and services at affordable and reasonably comparable rates to all Americans whether they are located in urban, suburban, rural or insular areas. WTA believes that capacity, scalability, reliability and security considerations will require this National Broadband Network to be predominately a fiber optic network that eventually will stretch all the way to most homes,<sup>2</sup> and that will be complemented and supplemented by terrestrial and satellite wireless facilities.

In its June 8, 2009 comments in GN Docket No. 09-51, WTA proposed the following structure for a National Broadband Plan:

1. The ultimate goal should be the construction of fiber optic facilities to as many homes as economically and technically feasible. Whereas the replacement of existing copper loops with FTTH facilities will require substantial investments, WTA members report that the use of FTTH rather than copper in “green field” projects is increasingly becoming more economical from an initial cost standpoint as fiber costs decline and copper costs increase. From a long-term standpoint, FTTH is the superior technology with respect to both performance and cost. FTTH loops appear to have useful lives of 30 years or more, and can readily and inexpensively be upgraded to higher and higher broadband speeds merely by changing the electronics at both ends of the line. This scalability constitutes both a necessity and an overwhelming element of technical and economic superiority in a world where broadband services and capacity demands are rapidly evolving and where ultra high definition video services at speeds greater than 120 Mbps are already on the drawing board.
2. Broadband deployment costs can be controlled and spread out by employing the very successful and flexible model of the Interstate Highway System, and extending the fiber component of existing hybrid fiber-DSL and hybrid fiber-coax networks toward the goal

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<sup>1</sup> Such emerging broadband-enabled services include cloud computing, ultra high definition video, advanced videoconferencing, telepresence, real-time collaboration, smart appliances, home security, virtual sports, online gaming, virtual laboratories, telesurgery, remote diagnosis and medical imaging, as well as a host of services that are not yet envisioned.

<sup>2</sup> The total number of United States homes served by FTTH is now 4.4 million, or 4 percent of U. S. homes. The total number of U.S. homes passed by FTTH facilities is now 15 million, or 13 percent of U.S. homes. Karl Bode, *Rural Carriers Quickly Embracing Fiber*, [www.dslreports.com/shownews](http://www.dslreports.com/shownews) (viewed December 1, 2009).

of furnishing FTTH loops and high-speed broadband services to as many customers as economically feasible. Such extension can be as rapid or gradual as broadband service demands, general economic conditions, and public and private investment resources warrant.

3. Wireless facilities should not be bogged down and congested by high-capacity broadband services that can be delivered more efficiently and more effectively to customers at fixed locations by fiber and hybrid fiber-DSL loops. However, cellular, Wi-Fi and other wireless facilities are needed to provide mobile broadband services to customers while they are away from their homes and businesses. Because both wireline and wireless services are used by the substantial majority of residential and business customers, they constitute complementary services which should be deployed and supported in the many areas where there are demands for both technologies. The proper recognition of wireline and wireless services as complementary may mean that wireless broadband networks can be focused more efficiently along travel routes, in gathering places and other significantly trafficked areas where there are substantial needs for mobile broadband services.

4. Satellite facilities can be used as an interim or long-term option for providing some level of broadband service to remote areas where it is not economically and technically feasible to deploy wireline and/or terrestrial wireless broadband facilities.

For any National Broadband Plan, the essential first step is the construction, operation and maintenance of the basic broadband network switching and distribution facilities required to provide access to broadband services. WTA does not believe there is enough information available at this time to evaluate the optimal sizes and/or relative sizes of high-cost, low-income, E-rate and rural health care support programs. However, WTA does note that the basic broadband network facilities supported by the existing HCF mechanisms (and that should be supported by future broadband high cost mechanisms) are a prerequisite for the effective and efficient operation of the low-income, E-rate and rural health care support programs in high-cost rural areas. Put simply, if adequate broadband network facilities are not deployed in the area where a low-income household, school, library or health-care institution is located, that entity is not likely to be able to utilize desired broadband services effectively no matter how much support is available from the other USF programs.

The size of the overall federal HCF during specific future years will depend in major part upon how fast the Commission, the White House and the Congress want wireline and wireless broadband carriers to deploy particular broadband speeds and capacities in high-cost rural areas. Like the Interstate Highway System, deployment of broadband can be accomplished steadily, flexibly and efficiently: (a) by taking advantage of existing FTTH, hybrid fiber-DSL, hybrid fiber-coax, terrestrial wireless and satellite facilities as much as possible, and (b) by upgrading and extending such existing facilities (and adding new facilities where necessary) at the pace warranted by changing broadband service needs and available public and private financial resources. Also, like the Interstate Highway System, existing broadband facilities need to continue to be supported and maintained so that the quantity and quality of broadband services in “served” areas do not deteriorate or suffer major service disruptions or calamities like the I-35 bridge collapse in Minneapolis.

The size of the three particular HCF programs applicable to RLECs<sup>3</sup> has remained relatively stable during the past five years while the public telecommunications network has developed more and more rapidly from a network providing predominately voice services to a network providing a greater and greater proportion of broadband services. Aggregate HCL, LSS and ICLS support for RLECs was \$2.395 billion in 2005, \$2.382 billion in 2006, \$2.411 billion in 2007 and \$2.406 billion in 2008.<sup>4</sup> It is expected to be \$2.412 billion in 2009 and \$2.353 billion in 2010.<sup>5</sup>

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<sup>3</sup> These three mechanisms are the High Cost Loop support (“HCL”), Local Switching Support (“LSS”) and Interstate Common Line Support (“ICLS”) mechanisms of the federal High Cost Fund (“HCF”) program.

<sup>4</sup> Source: USAC Quarterly Federal Universal Service Support Mechanism Fund Size Projections, Appendix HC01.

<sup>5</sup> Id.

Contrary to recent generalizations by the task force gathering data and developing draft proposals for the Commission's National Broadband Plan regarding the federal USF program,<sup>6</sup> these three HCF mechanisms have long been used by RLECs to upgrade their multiple use networks to deploy FTTH loops, hybrid fiber-DSL loops and soft switches capable of providing access to broadband services as well as voice services. The use of HCF support for such prudent facility upgrades was expressly permitted by the Commission in its 2001 *Rural Task Force* order.<sup>7</sup> In November 2007, the Federal-State Joint Board on Universal Service expressly recognized that a significant portion of the existing HCL mechanism supported the capital costs of providing broadband-capable loop facilities for rural carriers, and that RLECs had done a commendable job under this system of providing broadband to large portions of their rural customers.<sup>8</sup> Whereas it is difficult to fashion any general statement applicable to all of the more than 1,000 very independent RLECs, WTA believes that virtually none of its RLEC members have used their federal HCF support to deploy new "legacy" copper-only loop facilities or new "legacy" circuit switches during the past five-to-ten years or more.

The reasonable and appropriate conclusions to be drawn are that the level of high-cost support for RLECs will likely need to increase as nationwide broadband capacity requirements pass through the tens and hundreds of "megabits per second" levels toward the ultimate "gigabits per second" standards, and that the existing \$2.4 billion level of cost-based RLEC support constitutes a minimum floor that should not be decreased or redirected to other USF programs during the foreseeable future. Without the existing level of high-cost support dollars, most RLECs would not have been able to upgrade their networks to provide access to the current

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<sup>6</sup> News Release (*FCC Identifies Critical Gaps in Path to Future Universal Broadband*), released November 18, 2009.

<sup>7</sup> *Federal-State Joint Board on Universal Service* (Fourteenth Report and Order, Twenty-Second Order on Reconsideration, and Further Notice of Proposed Rulemaking in CC Docket No. 96-45, and Report and Order in CC Docket No. 00-256), FCC 01-157, released May 23, 2001, at para. 198-201.

<sup>8</sup> *In the Matter of High-Cost Universal Service Support and Federal-State Joint Board on Universal Service* (Recommended Decision), WC Docket No. 05-337 and CC Docket No. 96-45, 22 FCC Rcd 20477 (released November 20, 2007), at para. 30.

version of “broadband” services to large portions of their rural customers. As noted above, the typical WTA member has deployed hybrid fiber-DSL and/or FTTH facilities that enable more than 90 percent of its rural customers to access “broadband” services in the 512 kbps to 3 Mbps range. High-cost support needs to remain predictable and sufficient if RLECs (which are predominately small companies with very limited access to capital markets) are going to continue to be able to obtain financing and to make the future fiber extensions and upgrades necessary to keep pace with evolving broadband service and capacity requirements. Because many WTA members and other RLECs depend upon high-cost support for 30-to-40 percent or more of their regulated revenue streams, there are no realistic scenarios in which such high-cost support amounts can be reduced without impairing future RLEC broadband deployment as well as threatening the continued availability, quality and affordability of existing RLEC broadband services.

WTA recognizes that in the West many RLECs have deployed broadband facilities and services to a much greater extent than some larger incumbent local exchange carriers (“ILECs”) have done in nearby rural areas. WTA does not oppose the provision of additional high-cost support to such larger ILECs, but only if none of such additional support is reallocated from (or offset by decreases in) the high-cost support dollars currently distributed to RLECs. Whereas RLECs need substantial high-cost support to continue investing in and operating their broadband networks due to their lack of financial resources and their minimal access to capital markets, it appears that lagging broadband deployment by the larger ILECs in their less desirable and less profitable rural exchanges has primarily been the result of financial market pressures to maximize their profits and stock prices and of preferences for more lucrative business opportunities in other markets. WTA has proposed that this problem be reduced somewhat by

regulatory changes (such as more rapid and accessible study area waivers and elimination of the “parent trap” provisions of Section 54.305(b) of the Rules) that would make it easier for RLECs to acquire and upgrade low-priority rural exchanges of larger ILECs that RLECs have a much greater interest in serving (as well as a significantly better record of operating and upgrading).

### **III** **Contribution Methodology**

WTA does not believe that the existing USF program, much less a future USF with potentially larger mechanisms to support broadband deployment in high-cost areas, can continue to be sustained by a contribution mechanism based upon interstate and international end user revenues. The current contribution mechanism employs a base that is not only too narrow but also steadily shrinking, and puts too much of a burden upon interstate and international toll service providers and their customers. In addition, it has placed traditional long distance toll service providers at a significant competitive cost disadvantage vis-à-vis other long distance service providers that have been able to avoid or minimize USF contributions.

In the absence of a statutory change that would allow the Commission to assess USF contributions upon intrastate end user revenues, WTA supports a connections and/or numbers-based methodology that would require the service providers for all end users that utilize and benefit from the National Broadband Network to contribute to the USF. The emphasis is upon contributions by ALL providers of relevant telecommunications and broadband services with respect to the connections, numbers and/or functional equivalents for ALL of their end users. The rules need to be written and enforced to discourage gaming and arbitrage by requiring USF contributions for the connections, numbers and/or connection/number-based equivalents not only of customers of all ILECs, competitive local exchange carriers (“CLECs”), wireless carriers,

Internet service providers, voice over Internet Protocol providers, cable providers of telecommunications services and satellite carriers, but also of customers of existing and future providers of all substantially similar and competing services.

WTA would support the assessment of a larger contribution, based upon revenue or bandwidth,<sup>9</sup> upon high-capacity lines and services purchased by business and other end users. This larger contribution would reflect the fact that the end users of such high-capacity services are likely to make substantially greater use of the National Broadband Network and consequently derive a significantly greater benefit from it.

Finally, WTA recognizes that many families purchase service on a single wireline phone-connection-number, as well as on multiple wireless phones-connections-numbers for each adult and adolescent family member. WTA can see a very slight discount for the USF contributions relating to the second and additional cell phones purchased by or for members of the same household under a wireless family plan. However, such discount should be limited to the 5-to-10 percent range, because individual cell phone users (including adult and adolescent users participating in family plans) generally place substantial demands upon the network to monitor their locations and process their traffic (including demands upon wireline backhaul facilities and Internet backbone and middle mile facilities).

#### IV

#### **Transitioning Current HCF to Broadband High Cost Support**

As indicated above, RLECs have already proceeded far down the transition path from predominately single use voice networks to multiple use networks that deploy hybrid fiber-DSL loops, FTTH loops and soft switches to provide access to broadband services as well as voice

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<sup>9</sup> For example, a particular high-capacity service or service band can be defined in terms of a specified multiple of “connections” or “numbers” for the purpose of calculating the USF contribution applicable thereto.

services. The typical WTA member now offers broadband services to 90 percent or more of its rural customers at speeds ranging from 516 kbps to 3 Mbps or more.

### **A. Transition Plan and Path**

To date, a key to the success of this RLEC transition has been the approximately \$2.4 billion of annual support received by RLECs from existing cost-based federal high-cost support mechanisms. However, the job of creating a ubiquitous, high-speed broadband network and the associated need for continuing and sufficient federal high-cost support are far from over. Among other things: (a) the costs of constructing the last 10 percent or so of many rural broadband networks may be equal to or greater than the costs of constructing the first 90 percent due to terrain, climate, distance, population density and other factors; (b) the increase of “broadband” speeds from the current levels to tens, hundreds and thousands of megabits per second will require the extension of fiber optic facilities further and further into RLEC networks until FTTH facilities reach most or all households; (c) the availability, capacity and costs of “middle mile” transport over the long distances from many RLEC networks to and from the Internet will become increasingly important as broadband services become more predominant; and (d) factors such as distance, terrain, weather, population density and lack of economies of scale continue to make it difficult and expensive to operate and maintain RLEC networks whether they are single-use or multiple-use networks.

In addition to revising its current definition of supported services to include an evolving level of “broadband” services, the Commission needs to develop a reasonable transition from the existing HCF mechanisms that were designed initially to support traditional voice networks in high-cost areas to broadband support mechanisms that will be designed or modified to encourage

and enable the construction, upgrade, operation and maintenance of high-capacity broadband networks in high-cost areas. Because of very substantial differences in critical factors such as size, financial resources, access to capital markets, service areas, customer bases, economies of scale, cost structures, investment incentives and type of regulation, WTA believes that there should be separate broadband high-cost mechanisms for at least: (1) RLECs and other small wireline carriers of last resort (“COLRs”); (2) Regional Bell Operating Companies (“RBOCs”) and other larger wireline COLRs; and (3) wireless carriers and other carriers providing mobility and other desired services that complement or supplement the broadband services of COLRs.

The focus of high-cost broadband support upon COLRs is important and necessary because COLRs bear substantial obligations and responsibilities over and above those of other carriers to invest in, construct, operate and maintain network facilities to serve all of the customers located within their service area boundaries who request service. The essence of COLR status is the requirement to disregard normal business and economic considerations, and to construct facilities and provide service anyway to customers whose remote locations, high costs of service and/or minimal profit potentials would not normally induce a non-COLR to offer them access to service at affordable rates. In addition to general requirements to make the investments and expenditures necessary to serve all customers, COLRs are subject to a host of associated regulatory requirements that include quality of service standards and federal and state oversight of their rates, costs, accounting methods, record keeping and customer relationships.<sup>10</sup>

WTA does not take any position at this time as to how large wireline COLR and wireless/non-COLR broadband support mechanisms should be designed or the manner in which existing high-cost support of affected entities should be transitioned to them. For example, WTA

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<sup>10</sup> WTA notes that the COLR obligations of RLECs come not only from state COLR statutes and regulations, but also from other sources such as the bylaws of telephone cooperatives and covenants in loan agreements with the Rural Utilities Service.

recognizes that the potential size, funding priorities and construction requirements of a broadband support mechanism for large wireline COLRs will entail very difficult and complex considerations, and does not state any position regarding issues such as: (a) whether the mechanism should provide support on a wire center or Census Tract/Block basis; or (b) whether it should support construction costs or capital expenditures only, in a manner similar to that proposed by previous AT&T pilot broadband programs. Likewise, WTA takes no position at this time as to whether a wireless/non-COLR mechanism should support a single carrier or multiple carriers in a given wireless/non-COLR service area.

WTA envisions a broadband high-cost support mechanism for small wireline COLRs that will support broadband loop and broadband transport costs<sup>11</sup> that exceed some specified level of costs (for example, 135 percent) exceeding national average costs for such loops and transport services. Because of the degree to which RLECs have already advanced down the path from predominately single use voice networks to multiple use networks that provide access to broadband services, the transition period from the existing HCF mechanisms for RLECs to the initial broadband support mechanism need not be very long or complicated.

At a very minimum, the initial broadband mechanism for small COLRs should be funded at the same approximate \$2.4 billion annual amount<sup>12</sup> that has proven so successful during recent years in encouraging and enabling RLECs to offer access to broadband services to approximately 90 percent or so of their rural customers.<sup>13</sup> Whereas WTA has not had sufficient time or

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<sup>11</sup> WTA notes that the Commission and other entities have been using different definitions of “middle mile” and “second mile” transport. By “broadband transport costs,” WTA means the costs of transporting broadband traffic to and from an RLEC’s “last mile” facilities and the Internet.

<sup>12</sup> WTA notes that RLEC need for the approximately \$300 million of annual LSS included in existing HCF support is declining as circuit switches are replaced by soft switches. However, such LSS declines will be more than offset by the high and rapidly increasing costs of the broadband transport facilities and services that will be incurred by many RLECs as broadband traffic grows.

<sup>13</sup> It is WTA’s understanding and belief that the National Exchange Carrier Association (“NECA”), the National Telephone Cooperative Association (“NTCA”) and the Organization for the Promotion and Advancement of Small Telecommunications

resources since the November 13, 2009 release of *NBP Public Notice #19* to compile detailed data regarding the use of HCF support by its members, it can be reasonably presumed that most WTA members are spending the major portion of their existing HCF support upon the deployment and operation of multiple use DSL, fiber and hybrid fiber-DSL facilities capable of providing access to broadband services.<sup>14</sup>

The length of the transition period or periods from an initial broadband support mechanism to the ultimate broadband support mechanism for small wireline COLRs should depend in major part upon: (a) the time period during which the Commission or various state commissions require such COLRs to increase to 100 percent the percentage of the households in their service areas to which they offer access to “broadband” services; and (b) the nature and timing of Commission-required increases in the minimum transmission speeds of the facilities used to provide supported “broadband” services. The transition periods need to be long enough to permit RLECs and other small wireline COLRs not only to obtain the financing necessary for infrastructure extensions and upgrades but also to acquire permits and easements, hire installation contractors and/or machinery, purchase and take delivery of fiber and other associated broadband equipment, and bury or otherwise deploy the upgraded trunk, loop and other facilities. The transition periods also need to allow cost recovery to be completed for prior

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Companies (“OPASTCO”) also estimate that their RLEC members offer access to broadband services to 90 percent of so of their rural customers.

<sup>14</sup> For example, a rough rule of thumb is that an RLEC dedicates approximately the same percentage (give or take 10 percentage points) of its HCF to the deployment and operation of broadband-capable facilities as the percentage of customers to which it offers access to broadband service. Hence, where a “typical” WTA member offers access to broadband service to 90 percent of its customers, it can be estimated that it is spending between 80 percent and 100 percent of its HCF support for the deployment and operation of multiple use facilities capable of providing broadband services. WTA notes that this is a very rough rule of thumb. Even if WTA had been able to conduct a detailed survey, it is very difficult for RLECs to determine whether and to what extent their particular broadband deployment or broadband operational dollars came from federal HCF, interstate or intrastate access revenues, local service rates, state USF support, or some other revenue source. Moreover, HCF use percentages of individual members can differ widely for a variety of factors, including the type of financing used by the member to deploy broadband facilities (e.g., internal funds, RUS loans or private institution loans), the nature and amount of broadband facilities previously deployed by the member, the availability and costs of contractors and broadband equipment at the time of deployment, and the terrain, climate and population densities of the areas where the member is deploying broadband-capable facilities.

investments made in reliance upon the current HCF mechanisms and associated eligible telecommunications carrier (“ETC”) and COLR requirements.

Transition plans should also include exceptions or waiver procedures that excuse support recipients from extending broadband facilities and services to certain areas or customers under certain conditions. Extenuating circumstances warranting waivers or extensions should include: (a) where the cost of deploying and maintaining the facilities to serve the area or customer is unreasonably high (e.g., the per-customer cost exceeds some specified multiple of the national average broadband cost); (b) where the necessary financing, permits, easements and/or equipment cannot be obtained in timely fashion even though the broadband support recipient has exerted timely, diligent and good faith efforts to obtain them; or (c) where more than a specified portion of the potential customers in an area have declared in a petition or other appropriate document that they simply do not want to receive or pay for the subject broadband services.

As indicated above, the broadband support mechanism for small wireline COLRs will also need to address above-average costs of the “middle mile” and “second mile” transport facilities and services that carry broadband traffic between “last mile” networks and the Internet. In many rural areas, these transport facilities extend for 50-to-100 miles or more, and are becoming more and more expensive as broadband traffic and capacity needs increase. Without sufficient support for above-average broadband transport costs, broadband services will become unaffordable or economically non-viable in many rural areas.

#### **B. Number of Broadband Support Mechanisms and Impact of Competitive Loss**

There is no “one size fits all” broadband support mechanism that can efficiently and effectively encourage and enable broadband deployment in the nation’s many and varied rural areas by the equally differing types of large and small wireline and wireless carriers likely to

serve them during the foreseeable future. As indicated above, because of very substantial differences in critical factors such as size, financial resources, access to capital markets, service areas, customer bases, economies of scale, cost structures and investment incentives, WTA believes that there should be separate broadband high-cost mechanisms for at least: (1) RLECs and other small wireline COLRs; (2) RBOCs and other larger wireline COLRs; and (3) wireless carriers and other carriers providing mobility and other desired services that complement or supplement the broadband services of COLRs.

WTA does not take any position herein regarding the design of the large wireline COLR and wireless/non-COLR mechanisms. Each separate mechanism should be based upon the financial resources and investment incentives of the supported service providers, and the broadband service needs and costs of the supported service areas. The critical requirement is that each mechanism be designed and funded on the basis of its own particular circumstances, and that existing and potential support recipients be discouraged from lobbying for the reallocation of support dollars between or among mechanisms. This will minimize the intra-industry battles that have plagued USF proceedings in the past.

WTA opposes the design of broadband support mechanisms to include features that take away the “per-line” support associated with a customer upon the customer’s shift to a competitor. The critical flaw in the logic of such features is that carriers invest in, build and operate networks rather than individual customer lines. The heart and major portion of the construction and operating costs of an RLEC broadband “last mile” network are comprised of the soft switch and/or routers, the other central office electronics and the trunks that carry traffic most of the way between the central office and the customer to the nodes from which individual customer lines emanate. Such common network facilities are even more significant in the

emerging broadband world than in the older circuit switched world, for packet technologies are designed and intended to take advantage of the economies of using common network pipes rather than individual customer circuits. The costs of common network facilities are allocated on a per-line basis for HCF reporting purposes, but such common network facilities remain in place and their costs do not decrease or disappear when individual customers initiate service or terminate service to move to the networks of competitors.<sup>15</sup>

Moreover, even most costs of individual customer lines do not decrease when a customer terminates service to move to a competitor. Rather, most state COLR requirements require ILECs to maintain individual customer lines in place even after the customer terminates his or her service. For example, California requires ILECs to retain and maintain “warm lines” in premises where service is terminated, so that anyone can connect a telephone within the house (even if no one is paying for service) and make an E911 call.

“Per line” support reduction rules can have several substantial adverse consequences. First, they preclude the affected broadband support recipient from recovering its appropriate network costs, thereby affecting its ability to repay the loans it used to construct and deploy its network facilities, and its ability to continue to operate, maintain and upgrade its broadband network. Second, they discourage broadband support recipients from marketing their broadband services to marginal customers, for such customers pose the threat of reducing the carrier’s allocated “per-line” costs and support when they initiate service and then leaving such support at this reduced “per-line” level if they terminate service after a relatively short period. Third, uncertainty regarding the receipt of sufficient and predictable broadband support for common network costs and the repayment of associated infrastructure loans will make it more difficult

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<sup>15</sup> The situation is very similar for wireless carriers which must build and maintain networks comprised of switches, towers, antennas, transmitters and backhaul facilities. The addition or loss of individual customers generally does not significantly affect the cost of these common network facilities.

and expensive for RLECs and others to obtain financing for future broadband deployment and upgrade projects.

### **C. Cost Models Versus Actual Costs**

Actual costs have proven to be a very accurate, effective, efficient and readily auditable mechanism for calculating and distributing HCF support to RLECs. Contrary to urban legend, RLECs have been operating and upgrading their networks for years, and deploying increasing amounts of broadband-capable facilities during the last decade in compliance with the broadband exhortations of Congress, the Commission and state regulators, without significant inefficiency, waste or gold-plating.

The Commission needs to recognize that RLECs are small companies with limited financial resources that have very minimal access and leverage with respect to capital markets. They must detail and justify their investment and business plans to the RUS, CoBank, the Rural Telephone Finance Cooperative, equipment vendors and/or local banks before they can obtain the financing necessary for substantial investments in their rural networks. The loan application and review process has ensured that approved and funded RLEC investment projects are lean and efficient. Moreover, the Commission, state commissions, NECA and the Universal Service Administrative Company (“USAC”) all have authority to investigate or audit the investments and operating expenses of RLECs, and to disallow costs and expenses that were not reasonably and prudently incurred. USAC’s September 10, 2009 *“Final Report and Statistical Analysis of the 2006-07 Federal Communications Commission Office of Inspector General High Cost Program Beneficiary Audits”* found an estimated improper payment rate of only 2.74 percent, and noted that such estimate may be further reduced after detailed review of three beneficiaries whose support was still deemed to be “100% improper” at the time.

In contrast, forward-looking cost and other theoretical models are very difficult to develop and apply to the many very different RLECs without adversely impacting the investment incentives, cost recovery and financial health of substantial numbers of these small COLRs. First, the more than 1,000 RLECs have different developmental histories, different ownership and management structures, different equipment and network designs, different climates and terrains, and different customer densities and cost structures. No “one size fits all” model can accurately and equitably determine what the investment and costs for each of these different rural telephone companies “should” be. For example, while all RLECs may need to extend fiber further into their networks, the costs of burying or hanging fiber, and of operating and maintaining it, will differ significantly in farming, ranching, mountain, desert and forest areas, as well as in warm, cold, moderate and wet climates. Rather than trying to devise and apply a model to a varied and complex set of relevant circumstances, it is much more accurate, equitable and efficient to employ readily verifiable, reasonable and prudent actual costs to identify areas with high broadband construction, operating and maintenance costs and to distribute broadband support therein.

Second, forward-looking cost models create uncertainty that discourages substantial new investment by carriers and their investors and lenders who need assurances of cost recovery and loan repayment. Particularly in a business sector like broadband services where technology, service offerings and customer demands are rapidly changing, it will be very difficult to justify new investments if there is a significant possibility that the broadband support relied upon to repay the construction loan may be reduced substantially due to decreases in the applicable forward-looking costs (even if the loan amount itself has not changed).

Finally, forward-looking cost models afford little or no margin for error to RLECs and other small companies. Whereas the estimation errors of a forward-looking model may offset each other and balance out when applied to the large and varied AT&T or Verizon study areas, they are much more likely to make winners or losers out of smaller RLECs. And where a small RLEC receives much less high cost support under a model than it needs to recover its actual costs and repay its actual loans, its ability to invest in broadband facilities and provide broadband services will be impaired.

#### **D. One-Time Capital Expenditures Versus Operating Costs**

In the rural West, the expenses of operating and maintaining hybrid fiber-DSL and other broadband-capable facilities are far above the national average. Where “last mile” facilities as long as 20-to-50 miles are common, it frequently takes hours merely to drive to and from a rural customer’s home to investigate an initial trouble report. And where the problem is located somewhere along the 20-to-50-mile loop, it can take hours of driving and back-tracking through areas with and without paved roads (as well as gallons of fuel) to locate and repair it. In addition to long distances, RLEC operational and maintenance staffs must deal with rough terrain, extreme weather, and a lack of economies of scale. For example, in parts of Alaska, RLECs must do much of their maintenance by using airplanes, helicopters or boats to travel to remote locations during those portions of the year when weather permits. If the broadband service rates charged to their rural customers are going to remain affordable and reasonably comparable to those charged in urban areas, RLECs and other small COLRs will continue to need support with respect to the above-average portion of their maintenance and other broadband operating expenses.

Moreover, in a broadband world, some RLECs are going to need support for high “middle mile” transport costs. As WTA indicated in its November 4, 2009 comments regarding NBP Public Notice #11, many of its members are currently paying “middle mile” transport costs of \$100 or more per Megabit per month (with one member paying a whopping \$8,000 per Megabit per month), and such costs are very likely to increase in the future. Without some support for high “middle mile” operating costs, RLECs and other small rural carriers are not going to be able to charge monthly broadband service rates to their rural customers that are affordable and reasonably comparable to broadband service rates charged in urban areas.

#### **E. Other Revenues**

WTA members would love to reduce their dependence upon high cost support, and generate substantial revenues and profit from video, Internet access, toll and other services. They have been pursuing “triple play” and similar diversification strategies for much of the past decade. However, most RLECs lack the economies of scale needed to generate significant profits or positive cash flows from video, Internet access and toll services. Rather they generally have broken even or lost money on such ventures, and do not see the situation changing significantly for the better during the foreseeable future.

With respect to cable television, DSL and Internet Protocol (“IP”) TV ventures, the high costs of headend equipment on a per-customer basis and the rapidly increasing costs of program distribution rights have rendered such video services break-even propositions at best for most WTA members. Even where they have been able to join the National Cable Television Cooperative, the satellite program costs required to be paid by RLEC video operations are very high, particularly compared with the estimated satellite program costs of multiple cable system operators like Cox, Time-Warner and Comcast. During recent retransmission consent

negotiation periods, more and more WTA members and other RLECs have been forced to pay substantially increased monthly fees per customer (and often grant other concessions) if they want to continue carrying popular “local” affiliates of the NBC, CBS, ABC and/or FOX networks. The semi-annual copyright fees assessed by the U.S. Copyright Office have also increased. All in all, most WTA members and other RLECs offer video services as a courtesy and convenience to their customers, and consider themselves lucky if they have not lost much money on such video operations. They do not expect this to change significantly for the better during coming years. In fact, the increasing distribution of video programming via YouTube and other websites is likely to reduce their existing video service revenues without appreciably decreasing their video costs.

Likewise, Internet access services have not been significant profit centers for most WTA members. Because of their small sizes and small customer bases, their primary revenue sources are monthly service fees and they generally derive little or no additional revenue from content or adjunct services. With Internet access charges generally ranging from \$20 to \$30 per month for several hundred or a couple of thousand customers, most WTA members do not do much better than break-even with their Internet access services and do not expect them to develop into substantial profit centers that will reduce their need for USF support during the foreseeable future.

Finally, toll resale margins have decreased close to zero for many WTA members and other RLECs during recent years as underlying toll providers have increased their wholesale prices, while toll resale minutes have decreased as more and more customers use “free” wireless, VoIP, Magic Jack and other services to make their toll calls.

### **F. Broadband Grants Issued by NTIA or RUS**

There is no need for broadband mechanisms to take into account grants made to support recipients by the Broadband Technologies Opportunity Program (“BTOP”) of the National Telecommunications and Information Administration (“NTIA”) or by the Broadband Initiatives Program (“BIP”) of the RUS. Such grants ultimately constitute no investment by or cost to the recipient, and therefore no broadband high-cost support is needed to recover costs funded by grants. On the other hand, the loan portions of BIP loan-grant combinations that must be repaid, as well as any required matching funds, constitute investments and/or expenses that may be recovered from broadband mechanisms under appropriate circumstances if they are encompassed within supported costs that are above the required threshold.

### **G. Smaller Geographic Areas**

Whereas WTA has taken no position herein on the use of wire centers or other small geographic areas to calculate the broadband high cost support of large wireline COLRs, such small areas do not constitute an effective or efficient way to calculate broadband high cost support for RLECs and other small wireline COLRs. First, RLECs have long recorded and accounted for their costs on a study area basis, and would be required to put their small administrative staffs through the onerous, expensive and disruptive task of implementing very different new accounting systems and allocation methods in order to calculate broadband support on a wire center (or Census Tract or Census Block) basis. More important, in light of the fact that RLECs are presently offering access to broadband service to 90 percent or so of their customers, universal broadband availability in their areas can be achieved much more readily and efficiently by extending and upgrading their existing networks into the remaining unserved and

underserved portions of their study areas rather than creating one or more new small geographic areas therein.

### **H. Caps for Broadband Mechanisms**

WTA notes that existing HCF mechanisms for RLECs have been subject to caps since 1993, with the current caps having been adopted in the 2001 *Rural Task Force* order. WTA recognizes that the Commission has never been convinced by WTA's arguments to eliminate or increase the existing HCF caps, but notes that the pace at which the Commission determines to require small wireline COLRs to increase the percentage of their customers with access to broadband services from 90% to 100%, as well as minimum Commission-required speeds of supported broadband services, can significantly increase RLEC broadband costs and require substantial increases in the broadband support distributed to them. Any broadband support funding level or cap established by the Commission needs to reflect the fact that it has considerable flexibility in the setting of broadband access requirements and minimum supported broadband speeds, and that higher access requirements and faster minimum speeds are likely to require (and should be accompanied by) increases in the level of broadband support. Increases in broadband access or minimum speed requirements without appropriate increases in broadband support would constitute unfunded mandates that will quickly threaten or destroy the financial viability of many small COLRs.

### **I. Revision of ETC Requirements**

The obvious answer is that the eligible telecommunications carrier ("ETC") requirements for broadband high cost support mechanisms will need to include service and service quality standards relevant to broadband services. These should include reasonable schedules for the offering of access to broadband service to customers, and reasonable minimum required

broadband speeds. WTA has previously proposed that “broadband” be defined flexibly in terms ranges of attainable and desired speeds in order to encourage broadband deployment as broadband service demands evolve without unduly straining the financial resources of COLRs and broadband high cost support mechanisms.

ETC requirements should be different for each separate broadband support mechanism, and should be based upon the financial resources and investment incentives of the supported service providers, and the broadband service needs and costs of the supported service areas.

Given that voice services can be furnished readily over broadband facilities, WTA sees no reason why most or all existing voice service requirements with respect to existing HCF mechanisms should not be retained with respect to the new broadband support mechanisms.

## V

### **Impact of Changes on Revenue Flows**

WTA has not had the time or the resources since the November 13, 2009 release of *NBP Public Notice #19* to collect detailed financial information from its members and perform the requested financial impact analyses.

However, WTA is well aware that the approximately \$2.4 billion of annual HCF support distributed to RLECs during the 2005-2009 period translates to approximately 30-to-40 percent of the regulated revenue streams of most of its members. Virtually no business or governmental entity can lose much of such a substantial portion of its revenue stream, and remain viable. In the case of WTA members and other RLECs, the loss or threatened loss of their high-cost support revenues would require the cancellation or postponement of pending broadband investment projects, and require stringent measures (such as employee lay-offs and furloughs, maintenance cut-backs and delays, and/or local rate increases) to offset the actual revenue losses.

Today, the primary broadband “competitors” of RLECs that do not receive much or any HCF support are cable television (“CATV”) companies and Internet access service providers (“ISPs”). Whereas RLECs are COLRs that must serve all customers requesting service within their study areas, CATV companies and ISPs have no obligation to serve high-cost rural areas. Rather, CATV companies can and do limit their franchised service areas to the more densely populated cities, towns and villages within RLEC study areas. And ISPs generally have no service or coverage obligations, and can pick and choose whatever customers and/or service areas they wish. Hence, the likely impact of reducing or eliminating broadband high-cost support for RLECs in areas where there is already at least one competitor offering broadband is that the RLEC will not have sufficient financial resources to upgrade its network within the more densely populated core area where competition is present, and thus will have an inadequate base network and fiber trunks from which to extend broadband service into the outlying higher-cost areas where competitive CATV and ISP services are not being offered.

Likewise, in RLEC service areas where there are “multiple competitors” offering broadband, such “competitors” are usually wireless carriers. As noted above, wireless carriers generally offer mobile broadband services that complement or supplement DSL, hybrid fiber-DSL and FTTH services. Whereas wireless broadband speeds are increasing, it is not likely that actual wireless broadband speeds will catch up to wireline broadband speeds during the foreseeable future, particularly if substantial amounts of wireline broadband traffic were transferred to wireless broadband networks. Hence, the likely impact of reducing or eliminating broadband high-cost support for RLECs in areas where there are multiple wireless broadband competitors is that broadband services and speeds will be reduced toward wireless levels.

Finally, WTA estimates that interstate and intrastate access charges constitute approximately 30-to-40 percent of the regulated revenue streams of most of its members. Like existing HCF revenues, these access revenues have been used by RLECs in major part to obtain the financing necessary to construct multiple-use infrastructure, to repay such construction loans, and to pay the operating and maintenance expenses of existing voice and broadband services. And also like existing HCF revenues, virtually no business or governmental entity can lose very much of such a substantial portion of its revenues, and remain able to invest and operate at previous levels.

WTA continues to consider and evaluate options for reforming existing intercarrier compensation mechanisms and rates. It continues to prefer and seek a broad-based industry plan, but has no specific proposal to offer at this time.

## **VI Conclusion**

The existing federal HCF mechanisms have been a key factor encouraging and enabling RLECs to upgrade their multiple-use networks to extend fiber and hybrid fiber-DSL facilities closer and closer to their customers and to provide access to broadband services to approximately 90 percent of their rural customers. However, the transformation to a National Broadband Network is far from complete in RLEC service areas, and RLECs will need to make substantial future infrastructure investments and operating expenditures to provide broadband access to all of their customers and to upgrade their networks to accommodate rapidly increasing broadband services and transmission speeds.

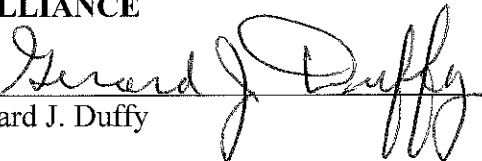
WTA proposes separate broadband high cost support mechanisms for: (1) RLECs and other small wireline COLRs; (2) RBOCs and other larger wireline COLRs; and (3) wireless and

other carriers providing mobility and other complementary or supplementary broadband services. The small wireline COLR mechanism should be funded initially, at a minimum, at the same \$2.4 billion annual support level that has enabled RLECs to make substantial progress deploying broadband facilities and services during the preceding five years. To the extent that the Commission requires broadband access to be extended to 100 percent of RLEC customers at an early date and/or requires existing RLEC broadband networks to be upgraded to furnish faster minimum broadband speeds, RLEC broadband support needs will increase above the initial \$2.4 billion annual level. Even without express Commission requirements, RLECs will need to make substantial additional broadband investments and expenditures, and to receive substantial broadband high cost support, in order to furnish their rural customers with broadband facilities and services that are reasonably comparable in quality and price to those available in urban areas.

Among other things, the proposed broadband high cost mechanism for small wireline COLRs: (a) should be based upon actual costs; (b) should support above-average broadband maintenance and operating expenses as well as investment costs; (c) will not be able to rely significantly upon cash flows from non-profitable video, Internet access and toll resale ventures; and (d) should support rural broadband networks and not take away the allocated "per-line" support of customers who change carriers or otherwise terminate service. .

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Respectfully submitted,  
**WESTERN TELECOMMUNICATIONS  
ALLIANCE**

By   
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Its Attorney

Dated: December 7, 2009