

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

In the Matter of )  
 )  
A National Broadband Plan for Our Future ) GN Docket No. 09-51

**COMMENTS  
of the  
ORGANIZATION FOR THE PROMOTION AND  
ADVANCEMENT OF SMALL TELECOMMUNICATIONS COMPANIES**

By: Stuart Polikoff  
Stephen Pastorkovich  
Brian Ford

**OPASTCO**  
21 Dupont Circle NW  
Suite 700  
Washington, DC 20036

(202) 659-5990

June 8, 2009

## TABLE OF CONTENTS

	<u>page</u>
SUMMARY .....	iii
I. INTRODUCTION .....	1
II. RURAL SERVICE AREAS SHOULD HAVE THE SAME BROADBAND SPEEDS AND DEFINITIONS AS URBAN AREAS, AS WELL AS ACCESS TO WIRELINE BROADBAND TECHNOLOGIES THAT CAN BE UPGRADED TO MEET FUTURE BANDWIDTH DEMANDS .....	4
A. The definition of broadband should keep pace with the rapid evolution of technology and consumer demand toward bandwidth-intensive applications and services .....	4
B. Access to a robust, affordable wireline broadband connection, not the number of providers, should be the key measurement for determining whether people have broadband access in rural service areas .....	9
C. A national broadband plan should account for the data speeds necessary to accommodate the video component of a growing number of applications and services .....	10
D. Wireline technologies are uniquely capable of providing the scalability and bandwidth capacity that will fulfill consumer demand in rural service areas over the long term .....	13
E. Rural service areas should not have lower definitions or standards for broadband because the entire nation benefits from these areas having access to the same level of service that is available in urban areas .....	16
III. THE ONGOING AVAILABILITY OF ROBUST BROADBAND SERVICES THROUGHOUT RURAL SERVICE AREAS WILL NECESSITATE SUFFICIENT AND SUSTAINABLE UNIVERSAL SERVICE MECHANISMS THAT ARE APPROPRIATE FOR RURAL ILECS AND THEIR CUSTOMERS .....	19
A. Broadband should be added to the list of supported services under the High-Cost program so that rural ILECs are able to deploy broadband ubiquitously throughout their service areas and can continue to maintain and upgrade the infrastructure .....	19

B.	To sufficiently support the deployment and ongoing provision of robust broadband services in rural service areas, the existing embedded cost-based support system should be updated by: (1) removing the cap on the HCLS mechanism, (2) providing support for high middle-mile transport costs, and (3) establishing a replacement mechanism for lost access revenues .....	22
C.	A rebuttable presumption should be established that it is not in the public interest to support multiple wireline broadband providers in a rural service area .....	27
D.	A High-Cost Program that sufficiently supports robust broadband services throughout rural service areas can be made sustainable by permanently eliminating the identical support rule for competitive ETCs and expanding the base of USF contributors to include all facilities-based broadband Internet access providers .....	31
E.	Broadband Internet access service should be supported under the Low Income program.....	34
IV.	THE COMMISSION SHOULD ENSURE THAT RURAL ILECS THAT PROVIDE WIRELESS BROADBAND SERVICES HAVE ACCESS TO SPECTRUM, JUST AND REASONABLE RATES FOR DATA ROAMING, AND THE LATEST MOBILE WIRELESS HANDSETS .....	35
V.	THE PRINCIPLES CONTAINED IN THE FCC’S 2005 INTERNET POLICY STATEMENT ARE SUFFICIENT TO ADDRESS DISCRIMINATION AND SHOULD NOT BE SUPPLEMENTED.....	38
VI.	THE COMMISSION CAN SUFFICIENTLY MEASURE BROADBAND AVAILABILITY IN RURAL SERVICE AREAS BY UTILIZING DATA COLLECTED UNDER EXISTING REPORTING REQUIREMENTS AND FROM OTHER SOURCES.....	41
VII.	THE MUNICIPAL PROVISION OF BROADBAND IS NOT NECESSARY IN AREAS SERVED BY RURAL ILECS.....	44
VIII.	RETRANSMISSION CONSENT AND OTHER VIDEO ACCESS RULES SHOULD BE REFORMED EXPEDITIOUSLY BECAUSE BUNDLING VIDEO SUBSCRIPTION SERVICES WITH BROADBAND HELPS TO SPUR BROADBAND ADOPTION.....	45
IX.	CONCLUSION.....	48

## SUMMARY

Areas served by rural ILECs should have the same broadband definitions and standards, and access to the same speeds, as urban areas. They should also have access to robust and scalable wireline broadband technologies that can be upgraded to meet future bandwidth demands. In addition, the FCC's definition of broadband should be as forward-looking and flexible as possible, in order to account for rapid technological and marketplace changes.

It would be a fundamental error to establish goals for bandwidth capacity that are merely sufficient to accommodate today's broadband-enabled applications and services. Copious amounts of research, along with demand in rural service areas, show that the "need for speed" will continue to accelerate. Applications related to jobs and commerce, public safety, health care, and education are already envisioned with bandwidth requirements of 100 Mbps and higher.

There is no compelling public policy argument for artificially incenting new wireline broadband entrants in rural service areas. Once provided with a robust, affordable wireline connection, rural consumers have the ability to enjoy the vast universe of broadband-enabled applications and content on the Internet.

A national broadband plan must account for the growing preponderance of video embedded in broadband applications and services. Teleconferencing, remote medical diagnosis, distance learning, interactive job training, and of course entertainment services – which help to drive broadband adoption – are all examples of this trend.

Wireline technologies are uniquely capable of scaling up to meet the bandwidth needs of residents and businesses in rural service areas. While wireless platforms can

offer complementary services, these technologies cannot provide the faster speeds that wireline broadband technologies are capable of delivering and that consumers in rural service areas will require and demand over time.

Broadband should be made a supported service under the High-Cost program. This would enable deployment to the highest-cost consumers in rural service areas. Equally important, it is necessary for ongoing operations and the network upgrades needed to provide “next generation” broadband technologies and speeds to these areas.

The FCC should maintain the embedded cost-based support system for rural ILECs, as it has proven to be successful in promoting broadband deployment as well as being accountable to the public. However, the Commission should remove the cap on HCLS, which fails to account for the additional deployment and upgrade costs that rural ILECs must incur in order to provide robust broadband services throughout their territories. Also, support should be provided for the high middle-mile transport costs that rural ILECs often incur in reaching the Internet backbone, which can make the business case for offering higher speeds difficult. In addition, expeditious intercarrier compensation reform, including a replacement mechanism for lost access charge revenues, is key to rural ILECs’ ability to make future network investments.

The FCC should establish a rebuttable presumption that it is not in the public interest to support multiple wireline broadband providers in rural service areas. In areas where the incumbent is already providing exemplary service, supporting additional wireline providers would threaten the quality and affordability of broadband and unnecessarily increase the size of the USF. Also, the Commission should eliminate the identical support rule and require all facilities-based broadband providers to contribute to

the USF, which would sustain the Fund for the long term while still allowing rural service areas to be sufficiently supported. Finally, broadband service should be supported by the Low Income program.

The FCC can encourage wider deployment of wireless broadband services in rural areas by increasing rural carriers' opportunities to acquire spectrum, and by declaring data roaming to be a Title II service. It should also ban the use of exclusive agreements between handset manufacturers and large wireless carriers.

The FCC's existing Internet Policy Statement is sufficient to address discriminatory behavior and the Commission has demonstrated its willingness to take remedial action against those who commit violations. Thus, adoption of a fifth principle is unnecessary, and would discourage future broadband investment in already difficult-to-serve rural service areas.

The FCC and some states presently collect a significant amount of detailed data from broadband providers, and supplemental efforts have recently been mandated by law or are being considered. Thus, the Commission should not burden rural ILECs with additional and unnecessary reporting requirements.

Given rural ILECs' record of success in deploying broadband, municipal provision of broadband is unnecessary in rural service areas, and would only serve to discourage further private investment. Finally, the FCC's video access rules should be reformed expeditiously, because bundling video and broadband spurs broadband adoption, which gives rural ILECs increased incentive and resources to invest in their broadband networks.

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

In the Matter of )  
 )  
A National Broadband Plan for Our Future ) GN Docket No. 09-51

**COMMENTS  
of the  
ORGANIZATION FOR THE PROMOTION AND  
ADVANCEMENT OF SMALL TELECOMMUNICATIONS COMPANIES**

**I. INTRODUCTION**

The Organization for the Promotion and Advancement of Small Telecommunications Companies (OPASTCO) hereby submits these comments in response to the Notice of Inquiry (NOI) in the above-captioned proceeding.<sup>1</sup> OPASTCO is a national trade association representing approximately 520 small incumbent local exchange carriers (ILECs) serving rural areas of the United States. Its members, which include both commercial companies and cooperatives, together serve more than 3.5 million customers. Almost all of OPASTCO's members are rural telephone companies as defined in 47 U.S.C. §153(37). On average, OPASTCO members offer broadband to roughly 90 percent of the customers in their service territories.

The NOI seeks comment on the development of a national broadband plan<sup>2</sup> that will enable the buildout and utilization of high-speed broadband infrastructure. The contents of this plan will obviously have a profound impact on virtually every facet of the

---

<sup>1</sup> *A National Broadband Plan for Our Future*, GN Docket No. 09-51, Notice of Inquiry, 24 FCC Rcd 4342 (2009) (NOI).

<sup>2</sup> *See*, American Recovery and Reinvestment Act of 2009, Pub. L. No. 111-5, 123 Stat. 115 (2009), §6001(k)(1) (Recovery Act). The Recovery Act requires the Commission to deliver a report containing a national broadband plan to the House of Representatives Committee on Energy and Commerce and the Senate Committee on Commerce, Science, and Transportation by February 17, 2010.

lives of residents in the areas served by rural ILECs (rural service areas) – job opportunities, health care quality, educational opportunities, public safety, and community development, to name just a few.

In a word, when it comes to broadband, what consumers in rural service areas need, and what will benefit the entire nation if they have it, is **speed**. No different than metropolitan areas, rural service areas have a need for the same high speeds that can accommodate the growing number of increasingly bandwidth-intensive applications and services that ride over the broadband infrastructure. Therefore, the definition of “broadband” should be the same in rural service areas as it is in urban areas, and should evolve to keep pace with rapid changes in technology and consumer expectations.

Most importantly, rural service areas need access to wireline broadband technologies because they are inherently more capable than wireless technologies of being upgraded to accommodate the bandwidth that will be necessary in the relatively near future. Once consumers in a rural service area have access to a fast, reliable, and affordable wireline broadband connection, they are able to gain access to the vast universe of applications, services, and content that the Internet has to offer.

In order to ensure that rural service areas have access to sufficient broadband capability, broadband should be added to the list of services supported by the High-Cost program. While there is no need to abandon the highly successful embedded cost-based support system for rural ILECs, in order to enable the availability of robust broadband throughout rural service areas, the cap on the high-cost loop support (HCLS) mechanism should be removed. In addition, support should be provided for rural ILECs’ high middle-mile transport costs, which is necessary to ensure that consumers in rural service

areas have access to affordable and “reasonably comparable” high-speed broadband connections. Furthermore, expeditious reform of the intercarrier compensation rules is needed that includes a replacement mechanism for lost access revenues.

Given that most rural ILECs are already providing robust, affordable broadband services, a rebuttable presumption should be established that supporting multiple wireline providers in a rural service area is not in the public interest. Furthermore, to secure the long-term sustainability of the Universal Service Fund (USF), while still allowing for rural service areas to be sufficiently supported, the identical support rule should be eliminated, and all facilities-based broadband Internet access providers should be required to contribute. Also, broadband service should be supported by the Low Income program.

So that rural service areas have greater access to complementary mobile wireless broadband services, rule changes should be made to improve rural ILECs’ ability to obtain wireless spectrum, just and reasonable data roaming rates, and the latest wireless handsets. In addition, the existing principles contained in the FCC’s Internet Policy Statement have already proven sufficient to address discriminatory network management practices, and therefore should not be supplemented. Likewise, existing broadband data reporting requirements, along with other sources of data, are sufficient to measure broadband availability in rural service areas, making additional reporting requirements on rural ILECs uncalled for. In light of rural ILECs’ success in deploying broadband, municipal entry into the broadband market is not necessary in rural service areas. Finally, the Commission should expeditiously reform its video access rules, because

bundling video and broadband together increases broadband adoption, which spurs more investment and deployment.

**II. RURAL SERVICE AREAS SHOULD HAVE THE SAME BROADBAND SPEEDS AND DEFINITIONS AS URBAN AREAS, AS WELL AS ACCESS TO WIRELINE BROADBAND TECHNOLOGIES THAT CAN BE UPGRADED TO MEET FUTURE BANDWIDTH DEMANDS**

**A. The definition of broadband should keep pace with the rapid evolution of technology and consumer demand toward bandwidth-intensive applications and services**

The NOI seeks comment on how broadband capability should be defined.<sup>3</sup> This is challenging, because rapid technological and marketplace changes can render a definition out of date in a relatively short amount of time. Therefore, it is important for the Commission's definition to be as forward-looking and flexible as possible, recognizing that it may be some time before the definition is adjusted.<sup>4</sup>

It would be reasonable for the FCC to continue to utilize the broadband definition system it recently established, which divides broadband into seven connection speed categories, or "tiers." At the low end, "Basic Broadband Tier 1" is defined as 768 kilobits per second (Kbps) to 1.5 megabits per second (Mbps) in the faster direction, while at the high end, "Broadband Tier 7" is defined as speeds greater than 100 Mbps in the faster direction.<sup>5</sup> This forward-looking definition system recognizes that broadband remains an evolving concept, based on rapid changes in technology and evolving

---

<sup>3</sup> NOI, 24 FCC Rcd 4346-4348, ¶¶15-22.

<sup>4</sup> In 1999, the FCC first defined broadband as having the capability to support 200 Kbps both downstream and upstream. *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 Telecommunication Act of 1996*, CC Docket No. 98-146, Report, 14 FCC Rcd 2398, 2406, ¶20 (1999). That definition remained in place for nine years until 2008, when the FCC divided broadband into seven connection speed categories, or "tiers." *Development of Nationwide Broadband Data to Evaluate Reasonable and Timely Deployment of Advanced Services to All Americans, Improvement of Wireless Broadband Subscriberhip Data, and Development of Data on Interconnected Voice over Internet Protocol (VoIP) Subscriberhip*, WC Docket No. 07-38, Report and Order and Further Notice of Proposed Rulemaking, 23 FCC Rcd 9691, 9700-9701, ¶20 (2008) (Broadband Reporting Order).

<sup>5</sup> Broadband Reporting Order, 23 FCC Rcd 9700-9701, ¶20.

consumer demands and expectations. At the moment, 768 Kbps in the faster direction (the low end of Broadband Tier 1) is suitable to serve as a minimum speed for the definition of broadband, yet all indications are that much higher speeds will be widely demanded in the relatively near future. Therefore, the Commission should periodically consider adjusting the speed ranges that are associated with each tier in order to reflect changes in technology and consumer demand. In other words, the speed range that now defines “Broadband Tier 2” would become “Basic Broadband Tier 1,” while the current speed range for “Broadband Tier 3” would be re-designated as “Broadband Tier 2,” and so forth.

In any event, today’s definitions are less important than the need to prepare for the consumer needs and demands of tomorrow. If, as the name of this proceeding indicates, the Commission is developing a national broadband plan *for our future*, it would be a fundamental error to establish goals for bandwidth capacity that are merely sufficient to accommodate today’s broadband-enabled applications and services. Acting Chairman Copps’ recent Report on a Rural Broadband Strategy wisely stated that rural networks should be able to evolve “to keep pace with the growing array of transformational applications and services that are increasingly available to consumers and businesses in other parts of the country.”<sup>6</sup> The report recognized that the requirements for Internet access are growing,<sup>7</sup> and stated that “networks deployed in rural areas should not merely be adequate for current bandwidth demands. Instead, they also

---

<sup>6</sup> Acting Chairman Michael J. Copps, Federal Communications Commission, *Bringing Broadband to Rural America: Report on a Rural Broadband Strategy*, GN Docket No. 09-29 (May 22, 2009) (Report on a Rural Broadband Strategy), ¶11.

<sup>7</sup> *Id.*, ¶80.

should be readily upgradeable to meet bandwidth demands of the future.”<sup>8</sup> The report continued:

Bandwidth-intensive applications could very quickly 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.<sup>9</sup>

Copious amounts of research, along with the experiences of rural ILECs, confirm the assessment that “the need for speed” will continue to accelerate for the foreseeable future. For example, a March 2009 report from the Information Technology and Innovation Foundation stated that broadband capabilities of 20 - 50 Mbps downstream and 10 Mbps upstream are needed to “enable the emergence of a whole host of online applications and services, many of which we can barely imagine today.”<sup>10</sup> The report provided specific examples of broadband applications and the corresponding bandwidths they require, such as high resolution video conferencing (5 Mbps upstream and downstream), video home security services (10 Mbps upstream), and very high resolution video conferencing known as “telepresence” (15 Mbps upstream and downstream).<sup>11</sup>

Similarly, a February 2008 report from the Congressional Research Service listed applications and the range of speeds they require. For example, applications as relatively basic as handling large e-mail attachments and ordinary telecommuting already require speeds of 1 - 5 Mbps. However, accommodating important and beneficial applications such as telemedicine, educational services, telecommuting with high-quality video, high-quality telepresence conferencing, and intelligent building control, among others, can

---

<sup>8</sup> *Id.*, ¶82.

<sup>9</sup> *Id.*

<sup>10</sup> Stephen Ezell, Robert Atkinson, Daniel Castro, and George Ou, *The Need for Speed: The Importance of Next-Generation Broadband Networks*, The Information Technology & Innovation Foundation (Mar. 2009) (The Need for Speed), p. 1.

<sup>11</sup> The Need for Speed, p. 5, Table 1.

only function well at speeds of 10 - 100 Mbps. Furthermore, applications that are now envisioned, such as high definition telemedicine, multiple educational services, and remote server services for telecommuting will require speeds of 100 Mbps - 1 gigabit per second (Gbps).<sup>12</sup>

The economic, public safety, health care, educational, and countless other benefits that are conveyed through high-speed broadband networks cannot be understated. These benefits are even more pronounced in rural service areas because of their relative isolation. In an August 2008 press release, the president of the Communications Workers of America aptly noted that speed “isn’t about how fast someone can download a full-length movie.” Internet speed, he continued, “determines whether we’ll have the 21st century networks needed to create the jobs of the future, develop our economy and give our children access to unlimited information.”<sup>13</sup> Therefore, it is imperative for a national broadband plan for our future to recognize that rural service areas require highly robust, scalable networks going forward. It is this realization that led Senator Jay Rockefeller, Chairman of the Senate Committee on Commerce, Science, and Transportation, to issue a call two years ago for a National Broadband Policy with the goal of achieving universal access to 100 Mbps service by 2015.<sup>14</sup>

Given the growing number of broadband applications and services that require high levels of bandwidth capacity, it is not surprising that the demand for increasingly faster speeds among residents and businesses is as evident in rural service areas as it is in

---

<sup>12</sup> Patricia Moloney Figliola, Angele A. Gilroy, and Lennard G. Kruger, *The Evolving Broadband Infrastructure: Expansion, Applications, and Regulation*, Congressional Research Service, R40230 (Feb. 19, 2009), p. 3, Table 1.

<sup>13</sup> Communications Workers of America, Press Release, *Speed Matters Report: U.S. Still Lags Behind* (Aug. 1, 2008), <http://www.cwa-union.org/news/cwa-news/telecom-news-speed-matters-report-u-s-still-lags-behind.html>.

<sup>14</sup> Senator Jay Rockefeller, Floor Statement: National Broadband Policy (May 8, 2007), <http://rockefeller.senate.gov/press/record.cfm?id=283937&>.

urban areas. For instance, Rural Telephone Service, Inc., based in Lenora, KS, serves roughly 13,800 customers spread out across an area equivalent to the states of Rhode Island and Connecticut combined. It uses several technologies, primarily fiber to the home, to offer broadband to 95 percent of its customers. Rural Telephone Service has informed the Commission that the combined bandwidth requirements for voice, video, and data services used by its customers results in a standard demand of 40 Mbps.<sup>15</sup>

Another example is Smithville Digital, headquartered in Ellettsville, IN, which earlier this year announced the availability of a 100 Mbps service package as part of its commitment to bring fiber to the home technology to all of its 30,000 customers.<sup>16</sup>

The demand for these speeds confirms that rural service areas, despite inherently higher deployment costs, should *not* have different definitions or standards for broadband than urban areas.<sup>17</sup> As noted above, the Report on a Rural Broadband Strategy correctly calls for rural networks that can evolve over time so that rural consumers and businesses will be able to utilize the same applications and services as their counterparts in the rest of the nation.<sup>18</sup> This goal could not be achieved if rural service areas were subject to a sub-standard broadband definition.

Recognizing that the deployment of high bandwidth “last-mile” broadband facilities does not, by itself, ensure that consumers will have access to broadband service at sufficiently robust speeds, the NOI inquires about the need for a greater focus on access to adequate middle-mile transport to the Internet backbone, especially in rural

---

<sup>15</sup> *Ex parte* letter from Larry E. Sevier, CEO, Rural Telecom Service Company, Inc., to Marlene H. Dortch, Secretary, FCC, GN Docket No. 09-29 (fil. May 14, 2009), pp. 1-2.

<sup>16</sup> Smithville Telephone Company, Inc. Press Release, *Smithville Offers fastest broadband speeds in Indiana* (Apr. 30, 2009), <http://www.smithville.net/press>.

<sup>17</sup> NOI, 24 FCC Rcd 4347-4348, ¶19. *See also*, Section II. E., *infra*.

<sup>18</sup> This is consistent with section 254 of the Telecommunication Act of 1996 (1996 Act), which states that consumers in rural and high-cost areas should have access to advanced services that are reasonably comparable to those available in urban areas. 47 U.S.C. §254(b)(3).

areas.<sup>19</sup> This is an important inquiry, since the broadband service that consumers experience is only as robust as the weakest part of the network that exists between the end user and the Internet backbone node that serves them. Often, rural ILECs are located so far from an Internet peering point that upgrading their middle-mile capacity to keep pace with consumer demand is prohibitively expensive. In this situation, it is of little use for rural ILECs to provide customers with a last-mile connection with high bandwidth capacity if the necessary commensurate upgrade to middle-mile facilities would render broadband service unaffordable to consumers. To address this problem, high-cost universal service support should be available to rural ILECs to offset the high costs of middle-mile transport to the Internet backbone.<sup>20</sup>

It is critical that a national broadband plan recognize that residents and businesses in rural service areas need and demand the ability to utilize all of the same bandwidth-intensive applications and services that continue to become available to those in the rest of the country. This can only occur if rural service areas have access to scalable, high-capacity networks that are the equivalent of those available elsewhere in the nation. A national broadband plan for our future must ensure that rural service areas are not left in the past.

**B. Access to a robust, affordable wireline broadband connection, not the number of providers, should be the key measurement for determining whether people have broadband access in rural service areas**

The NOI asks to what extent the Commission should take competition into account when it considers whether people have access to broadband capability.<sup>21</sup> In sparsely populated rural service areas, the paramount concern should be that consumers

---

<sup>19</sup> NOI, 24 FCC Rcd 4347, ¶17.

<sup>20</sup> See, Section III. B., *infra*.

<sup>21</sup> NOI, 24 FCC Rcd 4349, ¶25.

have access to a high-speed, reliable, and scalable wireline broadband network at affordable rates. Once a consumer obtains access to a fast, reliable, and affordable wireline broadband connection, they are able to gain access to, and choose freely from, the vast universe of broadband-enabled applications, services, and content that the Internet has to offer. Thus, once a consumer in a rural service area has access to such a wireline broadband connection, there is no compelling public policy argument for artificially incenting new wireline entrants into an area that otherwise could not naturally sustain them.<sup>22</sup>

It should be noted that a number of rural ILECs have, without universal service support, successfully “edged out” into neighboring rural areas served by non-rural ILECs specifically because they felt they could fulfill consumers’ demands for better broadband service. Thus, where value-laden broadband is not being provided, even in a rural area, it is very possible for competitors to be attracted to provide quality services to those consumers. However, in rural service areas where, in most cases, high-speed, reliable, and affordable wireline broadband service is already offered, the Commission should presume that the area is being adequately served, and decline to artificially incent new entrants.

**C. A national broadband plan should account for the data speeds necessary to accommodate the video component of a growing number of applications and services**

As the Commission develops its national broadband plan, it is critical to account for the growing preponderance of video in all manner of broadband applications and services. It is estimated that video will account for 50 percent of Internet traffic as early

---

<sup>22</sup> See, Section III.C., *infra*.

as 2012.<sup>23</sup> Today, one-way or two-way broadband video functions take many forms, and are increasingly embedded into common applications such as e-mail and chat programs. It must be stressed that broadband video applications are used for far more than entertainment purposes. Virtually any broadband-enabled application can include a video component that enhances its value, although it requires a higher speed to work as intended.

For example, business-critical teleconferencing and telepresence applications not only reduce travel costs and environmental impacts, but also enhance employment opportunities for rural residents and can be critical drivers of economic development. Family farms can use video applications to remotely monitor fields, crops, livestock, and equipment. Home and business security and fire monitoring services, featuring real-time and recorded video images that can be accessed from any location with a broadband Internet connection, help keep families and property safe. In addition, people with disabilities, such as the hearing impaired, can use broadband video applications to communicate visually and in real time.

More examples can be found in the areas of health care and education. For instance, real-time video medical diagnostic and other applications can help save lives and provide more treatment options to patients that otherwise might have limited access to specialized health care. And, distance learning designed to expand educational opportunities is significantly more effective when students can see teachers and any classroom materials that are presented.

---

<sup>23</sup> Cisco Systems, Inc. White Paper, *Cisco Visual Networking Index - Forecast and Methodology, 2007-2012* (June 16, 2008), p. 2. This figure does not include video exchanged via peer-to-peer file sharing.

Interactive job training in particular, which often incorporates video features that require significant amounts of bandwidth, is increasingly vital to those trying to adapt to changing economic conditions. A May 2009 article published by New American Media explained that 21 states now use the Internet for job training, which may include interactive video links with instructors. The lack of adequate transportation to job training centers, the cost of such transportation, and the need to find child or elder care makes training over the Internet an important option.<sup>24</sup> However, trainees need access to a robust broadband connection in order to reap the benefits of this type of application.<sup>25</sup>

Of course, broadband-enabled video also provides a source of entertainment. This can occur as part of a traditional channel subscription service or through newer “over the top” web-based services.<sup>26</sup> Either way, while entertainment may not bring the vital benefits that other applications produce, it is a major driver of broadband adoption which encourages and enables rural broadband providers to make further investments in deployments and upgrades.

When consumers who might otherwise not see much value to broadband purchase it in order to obtain video entertainment (whether on a subscription or “over the top” basis), they then have the opportunity to experience the benefits offered by the many other applications and services that are available to them.<sup>27</sup> A March 2007 study

---

<sup>24</sup> Khalil Abdullah, *U.S. Lags in Broadband Impede Economy*, New America Media (May 26, 2009), [http://news.newamericamedia.org/news/view\\_article.html?article\\_id=740b41efe70d0e0195f464edecfb2564](http://news.newamericamedia.org/news/view_article.html?article_id=740b41efe70d0e0195f464edecfb2564)

<sup>25</sup> OPASTCO also supports expanding the Low Income universal service program to support broadband Internet access service. *See*, Section III.E., *infra*.

<sup>26</sup> As “over the top” video services become more widespread, consumers are beginning to perceive their broadband connection as their primary source of video content. *See*, Paul Farhi, *Click, Change: The Traditional Tube Is Getting Squeezed Out of the Picture*, Washington Post (May 17, 2009), p. E1, [http://www.washingtonpost.com/wp-dyn/content/article/2009/05/14/AR2009051404522\\_pf.html](http://www.washingtonpost.com/wp-dyn/content/article/2009/05/14/AR2009051404522_pf.html). *See also*, Christopher Lawton, *More Households Cut the Cord on Cable*, The Wall Street Journal (May 28, 2009), p. D2, <http://online.wsj.com/article/SB124347195274260829.html>.

<sup>27</sup> *See*, Section VIII, *infra*.

conducted as part of the National Technology Scan found that 29 percent of households nationwide did not subscribe to any Internet access service, and had no intention of obtaining it within the next 12 months. In light of this finding, researchers concluded that the most likely way to extend broadband penetration is through the availability of video content. As the study's research director correctly stated: "Entertainment applications will be the key. If anything will pull in the holdouts, it's going to be applications that make the Internet more akin to pay TV."<sup>28</sup>

It is clear that video is becoming increasingly prevalent in all types of applications and services, and that it will continue to be a major cause of the accelerating demand for bandwidth. Therefore, a national broadband plan must ensure that consumers in rural service areas have access to broadband speeds that continue to accommodate these bandwidth-intensive applications. As discussed below, wireline technologies are best suited to accomplish this.

**D. Wireline technologies are uniquely capable of providing the scalability and bandwidth capacity that will fulfill consumer demand in rural service areas over the long term**

As illustrated above, consumers are demanding increasingly accelerated throughput speeds in order to utilize an ever-growing number of bandwidth-intensive applications and services. While many consumers enjoy the mobility offered by wireless platforms, these technologies cannot provide the faster speeds that wireline technologies are capable of delivering and that consumers in rural service areas will require over the long term. A September 2008 report from Rysavy Research and 3G Americas confirms

---

<sup>28</sup> *Offline Americans See Internet of Little Value*, Parks Associates Press Release (Mar. 27, 2007), [http://newsroom.parksassociates.com/article\\_display.cfm?article\\_id=3510](http://newsroom.parksassociates.com/article_display.cfm?article_id=3510). See also, John Horrigan, *Obama's Online Opportunities II*, Pew Internet & American Life Project, (Dec. 4, 2008), p. 2, [http://www.pewinternet.org/~media/Files/Reports/2008/PIP\\_Obama.and.Tech.pdf.pdf](http://www.pewinternet.org/~media/Files/Reports/2008/PIP_Obama.and.Tech.pdf.pdf). See also, *Consumer Insights to America's Broadband Challenge*, Connected Nation, (Oct. 13, 2008), p. 5, [http://connectednation.com/documents/ConsumerInsightsBroadbandChallenge\\_20081013.pdf](http://connectednation.com/documents/ConsumerInsightsBroadbandChallenge_20081013.pdf).

this, stating that “wireline networks have always had greater capacity, and historically have delivered faster throughput rates.” As a result, “... in most instances, [wireless and wireline technologies] are complementary.”<sup>29</sup>

Indeed, the Report on a Rural Broadband Strategy notes an immense disparity between wireline and wireless capabilities, observing that South Korea’s wireline 1 Gbps service is complemented by 4G wireless technology that provides 10 Mbps service.<sup>30</sup> The cutting-edge wireless platform in this example is fully 100 times slower than the available wireline technology. Similarly, the Rysavy Research report further illustrates that wireless broadband technologies lack the capacity to substitute for wireline technologies:

[T]he overall capacity of wireless systems is generally lower than it is with wireline systems. This is especially true when wireless is compared to optical fiber, which some operators are now deploying to people’s homes. With wireline operators looking to provide 20 to 100 Mbps... **the question becomes, is it possible to match these rates using wireless approaches? The answer is “yes” from a purely technical perspective, but it is “no” from a practical point of view.** It is only possible to achieve these rates by using large amounts of spectrum, generally more than is available for current 3G systems, and by using relatively small cell sizes. **Otherwise, it simply will not be possible to deliver the hundreds of gigabytes per month that users will soon be consuming over their broadband connections with wide-area wireless networks.** The only possible wireless approach to address such high-data consumption is with [short-range fixed mobile convergence] approaches... **This presupposes, however, an existing wireline Internet connection.**<sup>31</sup>

The Rysavy Research report projects that in the foreseeable future, advanced wireless technology will eventually be able to deliver peak rates of 42 Mbps of service to

---

<sup>29</sup> Rysavy Research and 3G Americas, *Edge, HSPA and LTE – Broadband Innovation* (Sept. 2008), p. 5, [http://www.rysavy.com/Articles/2008\\_09\\_Broadband\\_Innovation.pdf](http://www.rysavy.com/Articles/2008_09_Broadband_Innovation.pdf) (Rysavy Research). See also, Pew Internet & American Life Press Release, *The Mobile Difference: Wireless connectivity draws many users more deeply into digital life, but most Americans still connect to the internet mainly on wireline and rarely use a mobile device to access digital resources*, (Mar. 25, 2009), <http://www.pewinternet.org/Press-Releases/2009/The-Mobile-Difference.aspx>.

<sup>30</sup> Report on a Rural Broadband Strategy, ¶82.

<sup>31</sup> Rysavy Research, pp. 6-7 (emphasis added).

consumers.<sup>32</sup> Higher wireless speeds are possible in theory,<sup>33</sup> but the report recognizes that factors such as spectrum, backhaul, hardware, and network topology collectively impose practical limits on the speeds that wireless technology can provide.<sup>34</sup> However impressive 42 Mbps appears in today's terms, especially for a mobile platform, this level of speed cannot accommodate the transformational applications and services that even now are approaching or exceeding this threshold requirement in order to function.<sup>35</sup> Considering that rural broadband providers are already experiencing demand for 40 Mbps and higher,<sup>36</sup> wireless service, by itself, is insufficient for the long-term needs of consumers in rural service areas.

In addition, it is the experience of rural ILECs that environmental and topographic features can reduce the effectiveness of wireless broadband solutions to a greater degree than discussed in the Rysavy Research report. Depending on spectrum propagation characteristics, environmental factors such as steep terrain, foliage, and building materials can degrade or block wireless broadband connections. The expenses involved in obtaining more appropriate spectrum (if available) or deploying additional infrastructure in order to overcome these impediments can diminish or negate many of the perceived advantages of wireless broadband platforms, especially in rural service areas.

In short, wireline technologies are inherently more capable of scaling up to meet the needs of residents and businesses in rural service areas, so that they can utilize the vast array of applications and services that continue to grow in number and bandwidth

---

<sup>32</sup> *Id.*, p. 57.

<sup>33</sup> Report on a Rural Broadband Strategy, ¶10, fn. 14.

<sup>34</sup> Rysavy Research, pp. 24-25.

<sup>35</sup> *See*, Report on a Rural Broadband Strategy, ¶82 (“Bandwidth-intensive applications could very quickly become the norm in the U.S.—even in rural areas”).

<sup>36</sup> *See*, Section II.A., *supra*.

requirements. Wireless technologies can offer complementary services, but even they rely on more robust wireline technologies in order to drive consumer demand and provide functionality. The ability of consumers to utilize the many transformative applications and services that only wireline technologies will be capable of accommodating will spur more broadband adoption which, in turn, will enhance the economic feasibility of extending and upgrading broadband networks in rural service areas.

**E. Rural service areas should not have lower definitions or standards for broadband because the entire nation benefits from these areas having access to the same level of service that is available in urban areas**

Rural service areas should not have different definitions or standards for broadband than urban areas due to the higher deployment costs inherent to these areas.<sup>37</sup> The adoption of lower definitions or standards for rural service areas would diminish the value of the Internet to consumers across the nation. It would also discriminate against rural residents and businesses, and be damaging to both rural economies and the national economy.

The Report on a Rural Broadband Strategy observed that deploying broadband throughout rural areas will enhance the value of the broadband network for everyone on it nationwide.<sup>38</sup> This is referred to as the “network effect,” which has long been established by the Commission with respect to the public switched network.<sup>39</sup> The report also noted that the more extensive a network is, the greater the benefits that are derived from the

---

<sup>37</sup> See, NOI, 24 FCC Rcd 4347-4348, ¶19.

<sup>38</sup> Report on a Rural Broadband Strategy, ¶¶16, 117.

<sup>39</sup> *Id.*, ¶117, fns. 296, 297.

network.<sup>40</sup> The recognition of these widespread benefits was a primary reason for the establishment of the successful universal service program.<sup>41</sup>

As broadband-enabled applications and services evolve and demand more bandwidth, the same principles hold true. As more people and institutions are able to utilize bandwidth-intensive applications and services, the underlying networks that carry them convey greater benefits to all. And, as more broadband networks are able to accommodate these applications and services, broadband adoption is likely to rise, thereby reinforcing the network effect.

The universal service principles contained in the 1996 Act specifically call for consumers in rural and high-cost areas to have access to advanced telecommunications and information services that are reasonably comparable to those available in urban areas.<sup>42</sup> Thus, subjecting rural service areas to lower definitions or standards for broadband, or considering them to be adequately served by having access only to a technological platform with limited bandwidth capabilities, would be entirely at odds with the law's "reasonable comparability" principle.<sup>43</sup>

More importantly, it would be damaging to rural communities, as well as to the economy nationwide, if rural service areas were to be subject to a lower broadband definition, and/or were limited to a technology platform that lacks the bandwidth capacity

---

<sup>40</sup> *Id.*, ¶117, fn. 298.

<sup>41</sup> *Federal-State Joint Board on Universal Service*, CC Docket No. 96-45, Report and Order, 12 FCC Rcd 8776, 8783, ¶8 (1997).

<sup>42</sup> 47 U.S.C. §254(b)(3).

<sup>43</sup> There will likely remain instances where providing extremely isolated consumers with robust wireline broadband services will be economically infeasible, and offering them service via an alternate technology will be necessary. However, a properly crafted High-Cost universal service program that provides sufficient support for rural service areas (*see*, Section III, *infra*) would enable rural ILECs to offer robust wireline broadband service to the vast majority of their customers. *See*, NOI, 24 FCC Rcd 4349-4350, ¶26.

and scalability of wireline technologies.<sup>44</sup> The Report on a Rural Broadband Strategy noted a study which estimated that communities having access to mass-market broadband grew disproportionately in employment, the number of businesses that provide desirable information technology-related jobs, and the number of businesses overall. The Report therefore accurately concluded that deploying broadband throughout rural America promotes and sustains economic development, which benefits the national economy.<sup>45</sup>

However, if rural service areas were assured only of the lower broadband speeds offered by wireless platforms, this would violate the “reasonable comparability” principle, deprive rural consumers and businesses of access to vital broadband-enabled applications and services, and relegate rural communities to second-class economic status. The Commission should not adopt definitions and standards for rural service areas that would result in this kind of digital divide. Instead, the same broadband definitions and standards should be used for rural service areas as are used for metropolitan areas, and it should be recognized that rural service areas require robust, scalable wireline technologies in order to have access to adequate broadband service.

---

<sup>44</sup> Despite the drawbacks of wireless technologies, mobility is a feature that offers its own advantages, and many rural ILECs also provide wireless voice and data services in order to meet the needs of the communities they serve. Like consumers in other areas of the country, rural consumers demand and deserve complementary mobile broadband services. So while rural service areas should not be subject to lower definitions or standards for broadband than urban areas, it is reasonable to establish different definitions for mobile broadband services that complement wireline services. *See*, NOI, 24 FCC Rcd 4347-4348, ¶19.

<sup>45</sup> Report on a Rural Broadband Strategy, ¶16.

### **III. THE ONGOING AVAILABILITY OF ROBUST BROADBAND SERVICES THROUGHOUT RURAL SERVICE AREAS WILL NECESSITATE SUFFICIENT AND SUSTAINABLE UNIVERSAL SERVICE MECHANISMS THAT ARE APPROPRIATE FOR RURAL ILECS AND THEIR CUSTOMERS**

#### **A. Broadband should be added to the list of supported services under the High-Cost program so that rural ILECs are able to deploy broadband ubiquitously throughout their service areas and can continue to maintain and upgrade the infrastructure**

The time has come for broadband to be added to the list of services eligible to receive support directly from the High-Cost program. Broadband service unarguably meets all four of the statutory criteria in section 254(c)(1) of the 1996 Act that the FCC must consider prior to adding a service to the list of supported services.<sup>46</sup> In 2007, the Federal-State Joint Board on Universal Service (Joint Board) recommended that broadband Internet service be added to the definition of supported services.<sup>47</sup> More recently, the Report on a Rural Broadband Strategy recognized that “[a]s with the basic telephone network, the more people that connect to the broadband network, the more

---

<sup>46</sup> (1) Broadband has become essential to education, public health, and public safety. (The Recovery Act directs the Commission to include in its national broadband plan how broadband infrastructure and services can be used to advance these and other public policy goals. *See*, Recovery Act, §6001(k)(2)(D). (2) Broadband has been subscribed to by a substantial majority of residential consumers. (Survey data from December 2008 found that 57 percent of Americans have broadband at home. *See*, John Horrigan, *Barriers to Broadband Adoption – The User Perspective*, Pew Internet & American Life Project (Dec. 16, 2008), p. 1.) (3) Broadband is being deployed in public telecommunications networks by telecommunications carriers. (As of June 2007, 88.5 percent of zip codes reported having four or more providers of high-speed lines. *See*, *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*, GN Docket No. 07-45, Fifth Report, 23 FCC Rcd 9615, 9633, ¶35 (2008) (Fifth Section 706 Report).) (4) Broadband is consistent with the public interest, convenience, and necessity. (The fact that Congress has directed the Commission to develop a national broadband plan is a clear indication of this.)

<sup>47</sup> *High-Cost Universal Service Support*, WC Docket No. 05-337, *Federal-State Joint Board on Universal Service*, CC Docket No. 96-45, Recommended Decision, 22 FCC Rcd 20477, 20490-20492, ¶¶55-62 (2007) (Recommended Decision).

value the network has for everyone on it...”<sup>48</sup> As a result, the report advocated “adding broadband to both the contribution and distribution sides of the ledger...”<sup>49</sup>

The NOI states that “our goal must be for every American citizen and every American business to have access to robust broadband services.”<sup>50</sup> Likewise, section 254 of the 1996 Act states that consumers in rural and high-cost areas should have access to advanced services that are reasonably comparable in price and quality as those available in urban areas.<sup>51</sup> These objectives are simply unachievable in high-cost rural service areas on an ongoing basis without making broadband a supported service under the High-Cost program.

To begin with, explicitly supporting broadband under the High-Cost program is necessary to enable deployment of service to the highest-cost customers that remain unserved. Rural ILECs have demonstrated tremendous commitment to deploying broadband throughout their service areas to the greatest extent possible, despite the significant challenges they face in doing so. Nevertheless, there are still portions of some rural service areas that are so prohibitively expensive to serve, that broadband deployment will simply not be feasible in the near term absent explicit support for this purpose. By adding broadband to the list of services supported by the High-Cost program, it will provide these carriers with the cost recovery necessary to achieve ubiquitous deployment.

Equally important, if not more so, making broadband a supported service under the High-Cost program is necessary for ongoing operations and network maintenance.

---

<sup>48</sup> Report on a Rural Broadband Strategy, ¶16. *See also, Id.*, ¶117.

<sup>49</sup> *Id.*, ¶138.

<sup>50</sup> NOI, 24 FCC Rcd 4344, ¶5.

<sup>51</sup> 47 U.S.C. §254(b)(3).

This includes upgrading networks in rural service areas with “next generation” broadband technologies (*e.g.*, fiber to the home, fiber to the node) that that can accommodate what the Commission recognizes as an “...ever-greater demand for services and applications requiring greater bandwidth...”<sup>52</sup> As a recent report by the Information Technology & Innovation Foundation stated, “...proactive policy intervention is justified not just to extend broadband service to the Americans who lack it, but also to investments in networks, or parts of networks (*e.g.*, fiber extensions), that support higher speeds.”<sup>53</sup>

Indeed, consider the public policy goals which the Recovery Act envisions broadband infrastructure and services being used to advance – public safety and homeland security, health care delivery, education, worker training, entrepreneurial activity, civic participation, etc. – and the numerous broadband-enabled applications that will need to be accommodated as a result. These include first responder networks, emergency dispatch and coordination, telesurgery, remote patient monitoring, distance education, virtual laboratories, videoconferencing, and high-definition video streaming, just to name a few.<sup>54</sup> It is the aggregation of these and other bandwidth-intensive applications that continue to grow in number and popularity that will drive the need for ongoing, costly investments in network upgrades in rural service areas. Thus, without ongoing support for operations and maintenance, the quality, robustness, and utility of the broadband in rural service areas will lag behind what is available in metropolitan areas, contrary to the public policy goals in the Recovery Act and the universal service principles of the 1996 Act.

---

<sup>52</sup> Fifth Section 706 Report, 23 FCC Rcd 9650, ¶72.

<sup>53</sup> Need for Speed, p. 2.

<sup>54</sup> The benefits of these and other broadband-enabled applications are pronounced in rural service areas, where residents and small businesses are often physically isolated.

**B. To sufficiently support the deployment and ongoing provision of robust broadband services in rural service areas, the existing embedded cost-based support system should be updated by: (1) removing the cap on the HCLS mechanism, (2) providing support for high middle-mile transport costs, and (3) establishing a replacement mechanism for lost access revenues**

The existing High-Cost support program for rural ILECs, based on embedded network costs, should be retained, but updated to explicitly support broadband networks and services in rural service areas. The success many rural ILECs have had deploying broadband to a substantial percentage of their customer base has been made possible, in no small measure, by the existing embedded cost-based support system, which presently supports investment in broadband-capable, multi-use network infrastructure.<sup>55</sup> In addition, the embedded cost-based support system for rural ILECs is rational and highly accountable to the public, given that it is based on these carriers' own past investments and expense payments, and they must submit extensive data in order to potentially qualify for support.<sup>56</sup> Thus, it would be both inefficient and unnecessarily risky to make significant modifications to the existing support system for rural ILECs, or establish an entirely new replacement program, when there is already a program in place that has a track record of success and accountability.

While wholesale changes to the rural High-Cost program are uncalled for, there are several updates that the Commission should make to the existing system to

---

<sup>55</sup> The NOI acknowledges that a carrier providing broadband services indirectly receives the benefits of high-cost universal service support when its network provides both the supported voice services and broadband services. NOI, 24 FCC Rcd 4354, ¶39. The Joint Board has recognized the success of the existing High-Cost program for rural ILECs, stating that “[w]hile this program may need adjustments, we recognize its effectiveness in maintaining an essential network for [providers of last resort] POLRs and in deploying broadband.” Recommended Decision, 22 FCC Rcd 20486, ¶30.

<sup>56</sup> In order to make the rural High-Cost program rational and accountable for all eligible telecommunications carriers (ETCs) in rural service areas – competitive ETCs as well as rural ILECs – the Commission should permanently abandon the identical support rule and base support for competitive ETCs on their own costs. See, Section III.D., *infra*.

accommodate the inclusion of broadband as a supported service. First, in order to enable the ubiquitous availability of robust broadband services in rural service areas, it is necessary for the indexed cap on the HCLS mechanism to be removed. The cap on HCLS was set at a level that only takes into account the costs that rural ILECs incur in the provision of the existing list of supported voice-grade services. It does not account for the additional costs that will need to be supported if broadband becomes an explicitly supported service that must be offered ubiquitously throughout an entire rural service area.

As rural ILECs have increasingly invested in broadband-capable loop plant, the indexed cap has raised the threshold loop cost amount that a carrier must exceed to qualify for HCLS to well above 115 percent of the national average cost per loop (NACPL).<sup>57</sup> This has “...significantly reduce[d] support over time for carriers whose costs have remained relatively constant[,]”<sup>58</sup> although still in excess of 115 percent of the NACPL. As a result, it has become increasingly difficult for these carriers to maintain and upgrade their networks, to the detriment of further broadband deployment and improvements in service.

Based on the most recent data filed by the National Exchange Carrier Association (NECA), the true NACPL is \$336.73.<sup>59</sup> However, the cap presently requires the NACPL to artificially be set at \$382.97. Consequently, instead of a rural ILEC qualifying for HCLS when its cost per loop exceeds 115 percent of the true NACPL (\$387.24), it does not qualify until its cost per loop exceeds approximately 131 percent of the national

---

<sup>57</sup> See, 47 C.F.R. § 36.631.

<sup>58</sup> Recommended Decision, 22 FCC Rcd 20483, ¶22.

<sup>59</sup> National Exchange Carrier Association, Inc., *Universal Service Fund 2008 Submission of 2007 Results* (fil. Sept. 30, 2008).

average (\$440.42). It should be noted that there is no guarantee that state commissions or the market will allow a rural ILEC to recover the lost high-cost support through end-user rates, which potentially leaves carriers with a shortfall in their cost recovery and suppresses future investment in broadband-capable facilities.

In its recommendation to the Joint Board, the Rural Task Force recommended a “no barriers to advanced services” policy that stated in part:

The federal universal service support fund should be sized so that it presents no barriers to investment in plant needed to provide access to advanced services. Specifically, to remain “sufficient” under the 1996 Act, the fund should be sized so that investment in rural infrastructure will be permitted to grow.<sup>60</sup>

Obviously, the existing rural High-Cost program is not presently sized to support universal broadband availability in all rural service areas. Nor is it adequate to enable the significant network upgrades that will be necessary going forward to accommodate the plethora of bandwidth-intensive applications that residents and businesses will expect to be able to utilize. Therefore, if the Commission is committed to making robust broadband services available to every American citizen and business, then sufficient funding needs to be made available to rural ILECs to make this a reality in rural service areas.

The second update to the rural High-Cost program that the Commission should make is to provide explicit support for high middle-mile transport costs that many rural ILECs incur to reach the Internet backbone.<sup>61</sup> In its 2007 Recommended Decision, the Joint Board correctly noted that support for transport costs is presently nonexistent for

---

<sup>60</sup> *Federal-State Joint Board on Universal Service*, CC Docket No. 96-45, Rural Task Force Recommendation to the Federal-State Joint Board on Universal Service, 16 FCC Rcd 6165, 6185 (2001).

<sup>61</sup> NOI, 24 FCC Rcd 4347, ¶17.

rural carriers, and that overlooking these costs can be harmful.<sup>62</sup> Indeed, as broadband service availability and usage rise, the transport costs of some rural ILECs will increase substantially and threaten their ability to offer affordable, robust broadband services.<sup>63</sup>

The cost of transport to an Internet peering point or node is based upon both mileage and capacity. As the Report on a Rural Broadband Strategy recognizes, rural broadband networks are “typically built in locations that are geographically more removed from Internet backbone nodes” which can cause backhaul transport costs in rural areas to be “significantly higher than for networks in other areas.”<sup>64</sup> In addition, in order for consumers to get the full benefit of high bandwidth last-mile facilities, rural ILECs must also obtain access to middle-mile facilities with sufficient capacity. Thus, a rural ILEC may wish to improve their middle-mile access by switching from lower capacity “electrical” components (*e.g.*, DS3s, OC1s, OC3s) to dark fiber. But purchasing higher capacity middle-mile facilities increases the price per mile which, combined with the significant distances, risks making faster bandwidth speeds unaffordable to end users. Thus, the high cost of transport to the Internet backbone makes the business case for offering speeds much beyond “basic broadband” difficult, if not impossible, in some rural service areas. The Commission should therefore establish a mechanism for supporting the high middle-mile transport costs of rural ILECs. This would improve the likelihood that consumers in all rural service areas will have access to high-speed broadband connections that are reasonably comparable in quality and price to those offered in urban areas.

---

<sup>62</sup> Recommended Decision, 22 FCC Rcd 20483, ¶21.

<sup>63</sup> See, Section II.A., *supra*.

<sup>64</sup> Report on a Rural Broadband Strategy, ¶114.

Third, expeditious reform of the intercarrier compensation rules is needed that, most importantly, includes a replacement mechanism for lost access charge revenues. Rural ILECs have traditionally relied upon interstate and intrastate access charges for approximately 30 percent of their operating revenues, on average. These revenues are a critical source of cost recovery that play a significant role in rural ILECs' ability to invest in their networks and bring an evolving level of service to their customers, including the provision of broadband. However, rural carriers' revenues from access charges have become increasingly unstable in recent years due to factors such as: (1) the arbitrage of disparate access rates, (2) unidentifiable and unbillable "phantom traffic," (3) various forms of access avoidance (*e.g.*, the refusal of many voice over Internet protocol (VoIP) service providers to pay access charges when they terminate traffic on rural networks),<sup>65</sup> and (4) the proliferation of broadband connections, which has caused a decline in the number of traditional access lines as well as minutes that originate and terminate on the public switched network. Without a replacement mechanism for the lost revenues that have traditionally been derived from access charges, rural ILECs will become increasingly hampered in their ability to deploy broadband deeper within their territories and at the faster speeds that consumers are demanding.

OPASTCO was encouraged by the Commission's May 2, 2008 News Release, which announced its intention to move forward expeditiously with reform of both the High-Cost universal service program and intercarrier compensation, "...two carrier compensation regimes that are directly interrelated."<sup>66</sup> It was further encouraged by the Report on a Rural Broadband Strategy, which stated that "a critical factor in evaluating

---

<sup>65</sup> *See, for example*, NECA *ex parte* letter, WC Docket Nos. 04-36, 01-92 (fil. May 15, 2009).

<sup>66</sup> "Interim Cap Clears Path For Comprehensive Reform," FCC News Release (May 2, 2008).

any specific set of proposed [intercarrier compensation] reforms should be the effect they will have on the deployment of broadband services in rural areas.”<sup>67</sup>

In October 2008, OPASTCO and the Western Telecommunications Alliance (WTA) filed a compromise proposal for intercarrier compensation reform for rural rate of return (RoR)-regulated ILECs,<sup>68</sup> which is intended to be consistent with the pending Missoula Plan<sup>69</sup> and with recent access reform proposals advanced by other parties. The most essential element of the OPASTCO/WTA Plan is the establishment of a “Restructure Mechanism,” an access replacement mechanism that would provide the revenue stability and cost recovery needed to enable continued investment in broadband as access rates are unified and reduced. Moreover, it would preclude the need for substantial increases in end-user rates to offset access revenue reductions.

The Commission should keep in mind that the longer it waits to stabilize the revenue streams that rural ILECs derive from access charges, the more difficult it will be to ensure the provision of robust broadband services throughout rural service areas. It should therefore move quickly to adopt an access charge replacement mechanism for these carriers, such as the one presented in the OPASTCO/WTA Plan.

**C. A rebuttable presumption should be established that it is not in the public interest to support multiple wireline broadband providers in a rural service area**

Rural ILECs have generally demonstrated great commitment and made significant progress disseminating high-quality, affordable broadband services in their service areas.

---

<sup>67</sup> Report on a Rural Broadband Strategy, ¶155.

<sup>68</sup> OPASTCO and WTA *ex parte*, CC Docket No. 01-92, WC Docket No. 05-337, CC Docket No. 96-45 (fil. Oct. 10, 2008).

<sup>69</sup> Letter from Tony Clark, Commissioner and Chair, NARUC Committee on Telecommunications, Ray Baum, Commissioner and Chair, NARUC Task Force, and Larry Landis, Commissioner and Vice-Chair, NARUC Task Force, CC Docket No. 01-92 (fil. July 24, 2006) (attaching Missoula Plan for Intercarrier Compensation Reform).

They also continue to invest in their networks to reach additional consumers and increase bandwidth to accommodate all of the Internet applications and services that their customers wish to utilize. Providing universal service support to additional wireline broadband providers in a rural service area, where the incumbent is already providing exemplary service, would only serve to threaten the quality and affordability of broadband to those rural consumers and unnecessarily increase the size of the USF. Therefore, the Commission should establish a rebuttable presumption that it is not in the public interest to support more than one wireline broadband provider in a rural service area.<sup>70</sup>

The NOI asks how supporting more than one broadband provider in areas with low population density affects the ability of the providers to achieve optimal economies of scale and to continue to operate effectively. It also asks how it should evaluate the potentially increased costs of supporting multiple providers relative to any benefits to consumer welfare from competition.<sup>71</sup> The costs of supporting multiple wireline broadband networks include both the increased funding requirements for any additional supported carrier, as well as the decreased network efficiency of all providers that results when multiple competing carriers serve sparsely populated areas. These costs would not be outweighed by any benefit to consumer welfare when a rural ILEC is already offering

---

<sup>70</sup> It should be recognized that there will be instances where providing extremely isolated customers with robust broadband services will be economically infeasible, and offering them service via an alternate technology, such as satellite, will be necessary. However, in most cases, this will amount to a very small percentage of a rural ILEC's customer base. Also, it would be reasonable to support one mobile wireless broadband provider in a rural service area, in addition to the rural ILEC's wireline broadband service, assuming that the mobile wireless provider can demonstrate that it has above-average costs that would qualify it for support. As stated previously, broadband service over mobile technologies are not capable of providing the robust speeds that wireline technologies can provide and that consumers demand for use at fixed locations. Therefore, mobile wireless and wireline broadband service offerings are largely complementary and generally do not compete against one another. *See*, Section II.D., *supra*.

<sup>71</sup> NOI, 24 FCC Rcd 4359, ¶49.

high-quality, affordable broadband service to the majority of consumers in its service area, and has demonstrated a commitment to continuing to deploy and improve service. To the contrary, consumer welfare would likely be diminished if any additional wireline broadband providers were supported.

Supporting additional wireline broadband providers in a rural service area would cause the incumbent carrier's "take rate" to decline to some degree, thereby causing its network cost per subscriber to increase. This would place upward pressure on end-user rates, absent sufficient support to cover the loss of revenue previously derived from customers.<sup>72</sup> This, in turn, would threaten the affordability of wireline broadband services to rural consumers and maximum utilization. Moreover, not only would supporting additional wireline broadband providers in a rural service area unnecessarily increase the total amount of funding for that area, it would also likely necessitate a higher amount of support to each carrier on a per-subscriber basis than would otherwise occur if only the rural ILEC was supported. This is highly inefficient and a waste of limited public funding.

Also, in section 214(e)(2) of the 1996 Act, Congress recognized that supported competition would not always serve the public interest in areas served by rural telephone companies.<sup>73</sup> The FCC's 2005 ETC Designation Order acknowledged this by giving the Commission and state commissions the flexibility to conduct the public interest analysis on ETC applications differently, or reach a different outcome, depending upon whether

---

<sup>72</sup> See, *The Need for Speed*, p. 31 ("...providers who lose market share from increased competition while having to support fixed cost networks have to raise prices to avoid losing money. If providers are forced to amortize the fixed cost of their networks over significantly fewer customers, prices will increase even if profits are squeezed and efficiencies maximized.").

<sup>73</sup> Specifically, 47 U.S.C. §214(e)(2) says that state commissions "may" designate more than one carrier as an ETC in rural service areas, rather than "shall" for all other service areas. It also says that before designating an additional ETC in an area served by a rural telephone company, the state commission must find that the designation is in the public interest.

the area is served by a rural telephone company or a non-rural ILEC.<sup>74</sup> The FCC also stated that “...in light of the numerous factors it considers in its public interest analysis, *the value of increased competition, by itself, is unlikely to satisfy the public interest test.*”<sup>75</sup> Therefore, unless it can be conclusively demonstrated that a rural ILEC is not committed to providing high-quality, affordable broadband throughout its service area, the FCC and state commissions should not support additional wireline broadband service providers in these territories because it would not serve the public interest.

Finally, it should be noted that not supporting additional wireline broadband providers in rural service areas does not prevent other providers from offering service in these territories. In fact, an April 2007 survey of OPASTCO’s membership found that over 92 percent of the respondents had *at least* one other broadband provider offering service in their area, and over 75 percent had two or more broadband providers serving their territory.<sup>76</sup> Furthermore, all RoR-regulated carriers (which encompasses most rural ILECs) offer broadband transmission on a stand-alone, Title II common carrier basis.<sup>77</sup> This means that they are required to offer that transmission at specified, non-

---

<sup>74</sup> *Federal-State Joint Board on Universal Service*, CC Docket No. 96-45, Report and Order, 20 FCC Rcd 6371, 6390, ¶43 (2005)(ETC Designation Order)(“...in performing the public interest analysis, the Commission and state commissions may give more weight to certain factors in the rural context than in the non-rural context and the same or similar factors could result in divergent public interest determinations, depending on the specific characteristics of the proposed service area, or whether the area is served by a rural or non-rural carrier.”).

<sup>75</sup> *Id.*, 20 FCC Rcd 6390, ¶44 (emphasis added).

<sup>76</sup> *See*, OPASTCO comments, GN 07-45 (fil. May 16, 2007), p. 4.

<sup>77</sup> *Appropriate Framework for Broadband Access to the Internet over Wireline Facilities, Universal Service Obligations of Broadband Providers*, CC Docket No. 02-33, *Review of Regulatory Requirements for Incumbent LEC Broadband Telecommunications Services*, CC Docket No. 01-337, *Computer III Further Remand Proceedings: Bell Operating Company Provision of Enhanced Services; 1998 Biennial Regulatory Review – Review of Computer III and ONA Safeguards and Requirements*, CC Docket Nos. 95-20, 98-10, *Conditional Petition of the Verizon Telephone Companies for Forbearance Under 47 U.S.C. § 160(c) with Regard to Broadband Services Provided Via Fiber to the Premises; Petition of the Verizon Telephone Companies for Declaratory Ruling or, Alternatively, for Interim Waiver with Regard to Broadband Services Provided Via Fiber to the Premises*, WC Docket No. 04-242, *Consumer Protection in the Broadband Era*, WC Docket No. 05-271, Report and Order and Notice of Proposed Rulemaking, 20 FCC Rcd 14853, 14927, ¶138 (2005) (Wireline Broadband Classification Order).

discriminatory rates, terms, and conditions, including to non-facilities based Internet service providers (ISPs). Thus, there is nothing to prevent a non-facilities based ISP from availing itself of the rural ILEC's transmission offering to compete against the incumbent. Therefore, because supporting additional providers would likely diminish consumer welfare, and not supporting additional providers does nothing to preclude competition, a rebuttable presumption should be established that supporting multiple wireline broadband providers in a rural service area is not in the public interest.

**D. A High-Cost Program that sufficiently supports robust broadband services throughout rural service areas can be made sustainable by permanently eliminating the identical support rule for competitive ETCs and expanding the base of USF contributors to include all facilities-based broadband Internet access providers**

OPASTCO recognizes the need to ensure that the USF remains sustainable and that any growth in the Fund is necessary to further universal service goals. However, controlling Fund growth through arbitrary caps on rural ILECs' cost-based support is entirely at odds with the statutory principles that support be predictable and sufficient and that rural areas have access to "reasonably comparable" advanced services and rates. Instead, as the Report on a Rural Broadband Strategy points out, the long-term sustainability and integrity of the USF could largely be addressed by, *inter alia*, eliminating the identical support rule for competitive ETCs and requiring broadband providers to contribute to the Fund.<sup>78</sup>

It is indisputable that the cause of the dramatic growth in the High-Cost program in recent years has been the identical support rule, which bases the per-line support

---

<sup>78</sup> Report on a Rural Broadband Strategy, ¶138. OPASTCO also agrees with the report that Congressional authorization to permit the assessment of universal service contributions on intrastate as well as interstate revenue would be a valuable tool for addressing the sustainability of the USF and promoting broadband. *See also*, Recommended Decision, Statement of Commissioner Michael J. Copps, 22 FCC Rcd 20499-20500.

received by competitive ETCs on the per-line support received by the incumbent.<sup>79</sup> The Commission has acknowledged that this rule provides competitive ETCs with “little incentive to invest in, or expand, its own facilities in areas with low population densities...”<sup>80</sup> It therefore “bears no relationship to the amount of money...competitive ETCs have invested in rural and other high-cost areas of the country.”<sup>81</sup> As a result, the FCC has tentatively concluded that the identical support rule should be eliminated.<sup>82</sup> The Commission should adopt its tentative conclusion and, at least in rural service areas, require competitive ETCs to demonstrate their own costs in order to potentially qualify for high-cost support. This would hold competitive ETCs to a similar level of accountability as rural ILECs for the support they receive. Equally important, it would likely provide significant savings for the High-Cost program by ensuring that the funding received by competitive ETCs is no more than “sufficient” and is being used only for its intended purposes.

In addition, requiring all facilities-based broadband Internet access providers to contribute to the USF would go far towards securing the Fund’s long-term viability while also allowing for accountable, prudent growth in the High-Cost program. The Wireline

---

<sup>79</sup> According to the Commission, while support to ILECs has been flat since 2003, competitive ETC support, in the seven years from 2001 through 2007, has grown from under \$17 million to \$1.18 billion – an average annual growth rate of over 100 percent. See, *High-Cost Universal Service Support*, WC Docket No. 05-337, *Federal-State Joint Board on Universal Service, Alltel Communications, Inc., et. al. Petitions for Designation as Eligible Telecommunications Carriers, RCC Minnesota, Inc. and RCC Atlantic, Inc. New Hampshire ETC Designation Amendment*, CC Docket No. 96-45, Order, 23 FCC Rcd 8834, 8837-8838, ¶6 (2008) (Competitive ETC Cap Order). On May 1, 2008, the Commission adopted an interim cap on competitive ETC support, which capped the total annual competitive ETC support for each state at the level of support that competitive ETCs in that state were eligible to receive during March 2008 on an annualized basis. However, the cap remains in place only until the Commission adopts comprehensive high-cost universal service reform. See generally, *Id.*

<sup>80</sup> *High-Cost Universal Service Support*, WC Docket No. 05-337, *Federal-State Joint Board on Universal Service*, CC Docket No. 96-45, Notice of Proposed Rulemaking, 23 FCC Rcd 1467, 1472, ¶10 (2008) (Identical Support Rule NPRM).

<sup>81</sup> *Id.*, 23 FCC Rcd 1470, ¶5.

<sup>82</sup> *Id.*

Competition Bureau's most recent statistics on high-speed services for Internet access illustrate that subscribership to high-speed connections continues to grow at a fast pace.<sup>83</sup> Therefore, assessing all facilities-based broadband Internet access providers would establish a much less restricted, more sustainable contribution base than exists today and one that would continue to experience rapid growth for some time to come. Furthermore, if broadband is made a supported service, then the case for requiring these providers to contribute to the USF becomes even stronger, as they and their customers will all benefit from a ubiquitous broadband network.

Also, it should be noted that RoR-regulated ILECs are already required to contribute to the USF based on the revenues earned from their stand-alone broadband transmission service, which they offer as a telecommunications service on a common carrier basis.<sup>84</sup> This creates a competitive disadvantage for these carriers vis-à-vis virtually all other broadband providers, which provide broadband transmission under non-common carrier arrangements and therefore do not have a USF contribution obligation. By requiring all facilities-based broadband Internet access providers to contribute equitably to the USF, regardless of technology or regulatory classification, all providers would be placed on an equal footing with respect to contribution obligations. It would also make the contribution obligation for each broadband provider on a per-connection basis less than the per-connection obligation that presently exists for just RoR broadband providers. As a result, requiring all facilities-based providers to contribute equitably would have no adverse impact on any carrier's ability or incentive to deploy

---

<sup>83</sup> As of December 31, 2007, there were 121.2 million high-speed lines in service connecting homes and businesses to the Internet. This is a 46 percent or 38.4 million line increase from one year prior. *High-Speed Services for Internet Access: Status as of December 31, 2007*, Industry Analysis and Technology Division, Wireline Competition Bureau (Jan. 2009), p. 1.

<sup>84</sup> Wireline Broadband Classification Order, 20 FCC Rcd 14916, fn. 357.

broadband. In short, establishing contribution obligations for all facilities-based broadband Internet access providers, along with elimination of the identical support rule, should sufficiently address any perceived need to cap any portion of the High-Cost program for rural ILECs.

**E. Broadband Internet access service should be supported under the Low Income program**

As noted in the NOI, the Recovery Act requires that the FCC formulate a strategy for achieving affordability of broadband service and maximum utilization of broadband infrastructure.<sup>85</sup> Expanding the Low Income program to support the provision of broadband Internet access service, so that low-income consumers may qualify for discounts, would help to advance both goals. The ability to access broadband service is critical for low-income consumers for all of the same and numerous reasons that it is for all Americans. Access to broadband is especially important and beneficial to low-income consumers for purposes of education, public health, and public safety. Yet, broadband penetration for households with incomes of under \$20,000 is 25 percent, which lags far behind the penetration rate for all American households.<sup>86</sup> By making broadband Internet access service eligible for support under the Low Income program, it would enable ETCs to offer a specified discount for the service to eligible low-income consumers and still recover the lost revenues via the USF. This would make broadband more affordable for these Americans and help to increase the penetration rate among them.

Also, by enabling more low-income consumers to subscribe to broadband Internet access service, it will have the added benefit of increasing the utilization of the

---

<sup>85</sup> NOI, 24 FCC Rcd 4360, ¶52.

<sup>86</sup> John Horrigan, *Barriers to Broadband Adoption –The User Perspective*, Pew Internet & American Life Project (Dec. 16, 2008), p. 4.

broadband infrastructure. This is particularly beneficial in sparsely populated rural service areas, where the business case for broadband deployment is often weak and untenable absent high-cost support. By making broadband more affordable for low-income consumers in rural service areas, it will likely increase the rural ILEC's "take rate" which, in turn, will improve the ability and incentive of these carriers to make further investments in their broadband infrastructure, to the benefit of all the residents and businesses in the area.

**IV. THE COMMISSION SHOULD ENSURE THAT RURAL ILECS THAT PROVIDE WIRELESS BROADBAND SERVICES HAVE ACCESS TO SPECTRUM, JUST AND REASONABLE RATES FOR DATA ROAMING, AND THE LATEST MOBILE WIRELESS HANDSETS**

A significant number of OPASTCO members offer fixed and mobile wireless broadband services as complements to their wireline services and compete by seeking to provide more robust coverage in their license areas than the large regional and nationwide providers. However, rural ILECs face numerous disadvantages that often make the provision of high-quality, wireless broadband services in rural areas a challenge. The Commission can alleviate some of these challenges and encourage wider deployment of wireless broadband services in rural areas by increasing rural carriers' opportunities to acquire wireless spectrum, by declaring data roaming a Title II common carrier service, and by banning the use of exclusive agreements between handset manufacturers and large wireless carriers.

Just as with wireline broadband services, rural consumers' speed expectations for complementary wireless broadband services will continue to rise. As the applications and services that ride over the Internet become more and more bandwidth intensive, rural wireless carriers will need additional spectrum to be able to facilitate the use of these

tools by rural consumers. However, access to spectrum has long been a challenge for rural wireless carriers. This is due, in part, to the fact that a majority of the spectrum available in recent Commission auctions has been purchased by large, nationwide carriers.<sup>87</sup>

The Commission can take several steps to increase rural wireless carriers' opportunities to acquire wireless spectrum. First, future spectrum auctions should make available more licenses with small geographic license areas that rural wireless carriers can realistically obtain.<sup>88</sup> In addition, the Commission should adopt triggered "keep what you use" re-licensing mechanisms<sup>89</sup> and "entrepreneurs' blocks,"<sup>90</sup> in future spectrum auctions. Finally, a spectrum aggregation limit as proposed by RTG would provide rural wireless carriers with additional opportunities to obtain wireless spectrum.<sup>91</sup>

Furthermore, data roaming should be declared a Title II service so that all wireless carriers are required to offer any requesting carrier data roaming under just, reasonable, and nondiscriminatory rates, terms, and conditions.<sup>92</sup> Rural consumers value seamless,

---

<sup>87</sup> When measured on a MHz-POP basis, rural wireless carriers acquired only 1.19 percent of the available licenses in the recent 700 MHz auction. Rural Telecommunications Group (RTG) comments, WT Docket No. 06-150, PS Docket No. 06-229 (fil. Jun. 20, 2008), p. 4.

<sup>88</sup> Small, rural wireless carriers do not have a realistic opportunity to obtain spectrum when it is auctioned over large geographic license areas. This is due, in part, to the fact that rural carriers do not have access to the same levels of financing as their large counterparts. This makes it virtually impossible for a small, rural wireless carrier to compete for a license that combines the rural area which they seek to obtain with a neighboring metropolitan area. Congress anticipated, and tried to alleviate, this situation by requiring the Commission to avoid excessive concentration of licenses by large providers and ensuring that licenses are disseminated among rural ILECs, among others. 47 U.S.C. §309(j)(B)(3).

<sup>89</sup> Under a triggered "keep what you use" re-licensing mechanism, a rural wireless carrier that wishes to serve one or more rural areas within a license area could petition the Commission to evaluate whether those areas are being adequately served by the existing licensee. If the Commission determines that the rural portion(s) of the license area are not being sufficiently served, the petitioning carrier would then be granted access to that spectrum to serve rural consumers.

<sup>90</sup> "Entrepreneurs' blocks" are blocks of spectrum reserved exclusively for small, rural carriers and other new entrants for whom spectrum has historically been difficult to obtain.

<sup>91</sup> *Rural Telecommunications Group, Inc. Petition for Rulemaking To Impose a Spectrum Aggregation Limit on all Commercial Terrestrial Wireless Spectrum Below 2.3 GHz* (fil. July 16, 2008) (RTG Petition). See also, OPASTCO *ex parte* letter, RM No. 11498 (fil. Feb. 4, 2009).

<sup>92</sup> OPASTCO and RTG comments, WT Docket No. 05-265 (fil. Oct. 29, 2007).

mobile wireless broadband services, both at home and when they travel outside their rural areas. However, when rural consumers subscribe to the services of a nationwide wireless carrier, the quality of service they receive in the area where they reside is often spotty, at best. On the other hand, while the services of a rural wireless carrier are typically reliable and robust throughout their license area, their customers often face high data roaming charges when traveling outside that area. In declaring voice roaming to be a Title II common carrier service, the Commission recognized that consumers “increasingly rely on mobile telephony services and they reasonably expect to continue their wireless communications even when they are out of their home network area.”<sup>93</sup> This applies equally to mobile wireless broadband services, which can provide rural consumers with access to the Internet while on the go.

Finally, access to the newest mobile wireless devices is key to rural consumers’ ability to enjoy the latest applications and services available to mobile wireless customers. However, due to exclusive agreements between handset manufactures and large wireless carriers, these devices are often unavailable in many rural communities. The Commission should ban the use of these exclusive agreements, which would provide rural wireless carriers with the opportunity to offer these devices to their customers.<sup>94</sup>

---

<sup>93</sup> *Reexamination of Roaming Obligations of Commercial Mobile Radio Service Providers*, WT Docket No. 05-265, Report and Order and Further Notice of Proposed Rulemaking, 22 FCC Rcd 15817, 15819, ¶3 (2007).

<sup>94</sup> Congress has taken note of this issue and is reportedly considering legislation to ban these exclusive agreements. Anne Veigle, *Congress Mulling Bill on Wireless Handset Exclusivity Deals*, Communications Daily (May 22, 2009), p. 3.

**V. THE PRINCIPLES CONTAINED IN THE FCC'S 2005 INTERNET POLICY STATEMENT ARE SUFFICIENT TO ADDRESS DISCRIMINATION AND SHOULD NOT BE SUPPLEMENTED**

The NOI seeks comment on whether the FCC should add to its 2005 Internet Policy Statement<sup>95</sup> a fifth principle on nondiscrimination.<sup>96</sup> This is unnecessary in light of the Commission's demonstrated willingness to enforce the four existing policy principles. In addition, any obligations imposed on rural broadband providers that go beyond these principles would discourage future investment by imposing additional costs and creating additional risks to deploying broadband in areas that are already challenging to serve.

OPASTCO members are fully supportive of the Commission's existing Internet Policy Statement. OPASTCO agrees that consumers are entitled to access the content of their choice; run applications and use the services of their choice; utilize the legal devices of their choice; and are entitled to competition among network providers, application and service providers, and content providers. These principles have been in place for nearly four years, and are widely accepted and adhered to by service providers.

As the Internet Policy Statement notes, the FCC has the authority to enforce the statements' principles,<sup>97</sup> and it has already demonstrated its willingness to do so.

Specifically, the Commission recently acted on complaints that Comcast was engaged in

---

<sup>95</sup> *Appropriate Framework for Broadband Access to the Internet over Wireline Facilities*, CC Docket No. 02-33, *Review of Regulatory Requirements for Incumbent LEC Broadband Telecommunications Services*, CC Docket No. 01-337, *Computer III Further Remand Proceedings: Bell Operating Company Provision of Enhanced Services; 1998 Biennial Regulatory Review – Review of Computer III and ONA Safeguards and Requirements*, CC Docket Nos. 95-20, 98-10, *Inquiry Concerning High-Speed Access to the Internet Over Cable and Other Facilities, Internet Over Cable Declaratory Ruling*, GN Docket No. 00-185, *Appropriate Regulatory Treatment for Broadband Access to the Internet Over Cable Facilities*, CS Docket No. 02-52, Policy Statement, 20 FCC Rcd 14986 (2005) (Internet Policy Statement).

<sup>96</sup> NOI, 24 FCC Rcd 4358-4359, ¶48.

<sup>97</sup> Internet Policy Statement, 20 FCC Rcd 14987-14988, ¶4.

degrading the quality of a competing application used by its subscribers.<sup>98</sup> After fully investigating the allegations, the Commission found that Comcast violated the existing Internet Policy Statement by impeding "...consumers from 'run[ning] applications...of their choice.'"<sup>99</sup> To remedy the situation, the FCC ordered Comcast to: (1) disclose the exact details of its discriminatory network practices that led to the enforcement action; (2) submit a compliance plan detailing how it will transition from discriminatory to nondiscriminatory network management practices; and (3) disclose to the public and the FCC the network management practices it will utilize in the future as well any threshold that will trigger limits on its customers' bandwidth access.<sup>100</sup>

This action demonstrates that the Commission already has at its disposal the necessary tools to "...preserve and promote the open and interconnected nature of the public Internet..."<sup>101</sup> and address discriminatory behavior, making an additional principle superfluous. Furthermore, it gives service providers significant incentives to adhere to the Internet Policy Statement's clear and enforceable principles. Therefore, the existing Internet Policy Statement need not be supplemented.

In addition to concerns about the negative effect a fifth principle on nondiscrimination would have on future investment in hard-to-serve rural areas, another major concern is the legitimate need broadband providers will have in certain situations to prioritize certain types of network traffic. The Internet Policy Statement already states

---

<sup>98</sup> *Formal Complaint of Free Press and Public Knowledge Against Comcast Corporation for Secretly Degrading Peer-to-Peer Applications*, File No. EB-08-IH-1518, *Broadband Industry Practices Petition of Free Press et al. for Declaratory Ruling that Degrading an Internet Application Violates the FCC's Internet Policy Statement and Does Not Meet an Exception for "Reasonable Network Management,"* WC Docket No. 07-52, Memorandum Opinion and Order, 23 FCC Rcd 13028 (2008) (Comcast Enforcement Order).

<sup>99</sup> *Id.*, 23 FCC Rcd 13052-13053, ¶43 (citing Internet Policy Statement, 20 FCC Rcd 14987-14988, ¶4).

<sup>100</sup> Comcast Enforcement Order, 23 FCC Rcd 13059-13060, ¶54.

<sup>101</sup> Internet Policy Statement, 20 FCC Rcd 14987-14988, ¶4.

that the four principles contained therein are subject to reasonable network management,<sup>102</sup> but it provides no further detail on this point.

There are circumstances under which broadband providers will have a legitimate need to prioritize network traffic, and they should not be reluctant to do so as a result of an unclear policy principle on nondiscrimination and the possibility of enforcement action being taken.<sup>103</sup> For example, as the Department of Homeland Security has recognized, “[m]any of the Nation’s ... emergency services...rely on the uninterrupted use of the Internet....”<sup>104</sup> In the aftermath of a natural disaster, pandemic, terrorist attack, or other type of emergency event, broadband networks will experience inevitable surges of traffic, and network congestion is a very real possibility. Also, a natural disaster or other event could disable some of the network equipment necessary to deliver Internet traffic. Additionally, a pandemic or any type of event that results in damage to roads or office buildings may necessitate the increased use of telecommuting.<sup>105</sup> In such cases, broadband providers should have the freedom to manage Internet traffic and their networks as necessary to help their communities get through these extraordinary situations as smoothly as possible.

---

<sup>102</sup> *Id.*, 20 FCC Rcd 14988, ¶5, fn. 15.

<sup>103</sup> The Commission has already recognized the need for certain communications to receive priority in the event of an emergency. The Government Emergency Telecommunications Service (GETS) and the Wireless Priority Service (WPS) allows wireline and wireless communications providers to prioritize traffic “during a major disaster or attack in which the public telecommunications networks are congested by high call volumes and/or damage to the telecommunications infrastructure.”

<http://www.fcc.gov/pshs/services/priority-services/>

<sup>104</sup> *National Strategy for Homeland Security*, Homeland Security Council (Oct. 2007), p. 28.

<sup>105</sup> According to the FCC’s Public Safety and Homeland Security Bureau, “...as much as 40 percent of the nation’s workforce – including personnel supporting our critical communications infrastructure – will be absent during the height of a pandemic. Changes in work practices may significantly alter communications traffic due to increased telecommuting by the nation’s workforce. These work changes may result in disruptions to communications networks.”

<http://www.fcc.gov/pshs/emergency-information/pandemics.html>

Rural ILECs' broadband networks will play a crucial role in responding to the needs of their communities in the aftermath of a natural disaster, pandemic, terrorist attack, or other such emergency event. Therefore, while a non-discrimination principle is not needed, nor advisable, should one be adopted, it is important that it include explicit exceptions for prioritizing traffic as necessary in the event of an emergency.

**VI. THE COMMISSION CAN SUFFICIENTLY MEASURE BROADBAND AVAILABILITY IN RURAL SERVICE AREAS BY UTILIZING DATA COLLECTED UNDER EXISTING REPORTING REQUIREMENTS AND FROM OTHER SOURCES**

To measure the nation's progress in deploying broadband, the NOI seeks comment on the data that the FCC currently collects from broadband providers, as well as whether existing data reporting requirements need to be supplemented.<sup>106</sup> The Commission and some states already collect a significant amount of data from broadband providers, including rural ILECs, and supplemental efforts have recently been mandated by law or are being considered. Collectively, these data collections will provide the Commission with sufficiently detailed information regarding broadband availability and subscribership in areas served by rural ILECs. Thus, additional reporting requirements on rural ILECs would only serve to impose unnecessary burdens on these carriers, to the detriment of their customers.

OPASTCO recognizes that the Commission needs accurate and useful data on the state of broadband availability and subscribership in order to develop and maintain appropriate broadband policies. In this regard, the Commission recently took a major step to increase the precision and utility of the broadband data it collects by making significant revisions to its Form 477, which all facilities-based broadband providers must

---

<sup>106</sup> NOI, 24 FCC Rcd 4351, 4364-4365, 4377, ¶¶29, 61, 108.

complete semi-annually. As a result of these revisions, all broadband providers, including rural ILECs, are now required to report for each Census Tract they operate in, the number of broadband connections in service and the maximum service speeds provided to end users, broken down into eight speed categories for both upload and download speeds. Moreover, broadband providers must separately report this Census Tract-level information for each type of technology of service that they offer.<sup>107</sup> In March 2009, broadband providers filed this newly revised Form 477 for the first time.

Also, the Recovery Act and the Broadband Data Improvement Act (BDIA)<sup>108</sup> task several other federal agencies with responsibilities aimed at improving efforts to collect and analyze broadband-related data. For example, the Recovery Act requires the National Telecommunications and Information Administration (NTIA) to provide grants to states for broadband availability mapping projects and to make available on its website a nationwide broadband inventory map.<sup>109</sup> In addition, the BDIA requires the Government Accountability Office (GAO) to submit a report regarding additional metrics for comparing broadband services.<sup>110</sup> Furthermore, beyond these legislative mandates, several states have already begun or are considering broadband mapping projects to compile broadband availability data to aid policymakers.<sup>111</sup> The Commission should take advantage of these efforts and other sources of publicly available data, and integrate it with data collected from the newly revised Form 477.

Additionally, the Commission is now required by the BDIA to conduct annually (instead of “regularly”) its section 706 inquiry into the deployment of advanced services

---

<sup>107</sup> Broadband Reporting Order, 23 FCC Rcd 9695, ¶10.

<sup>108</sup> Broadband Data Improvement Act of 2008, Pub. L. No. 110-385, 122 Stat. 4096 (BDIA).

<sup>109</sup> Recovery Act, §6001(1).

<sup>110</sup> BDIA, §104.

<sup>111</sup> *See, Mapping and Deploying High-Speed Broadband*, Stateside Dispatch (Feb. 11, 2008), <http://www.progressivestates.org/blog/772/mapping-and-deploying-high-speed-broadband>.

to all Americans.<sup>112</sup> Since 1999, the Commission has conducted five of these inquiries. In responding to these inquiries, OPASTCO has on several occasions, along with other commenters,<sup>113</sup> provided broadband availability and subscribership data on a voluntary basis. This data can further supplement the government-mandated data collections and analyses discussed above.

Thus, the FCC's existing reporting requirements, combined with other data produced by states and other federal agencies, as well as data mined from other publicly available sources, will provide it with a sufficiently detailed and accurate picture of broadband deployment and subscribership in areas served by rural ILECs. In light of this, the Commission should recognize that imposing additional, more granular, or more frequent broadband reporting requirements on rural ILECs would place burdens on them that far outweigh the usefulness of any additional data collected.

Finally, it is important that any proprietary data collected by the Commission remain confidential.<sup>114</sup> As OPASTCO has noted in the past, rural ILECs have found predatory pricing by competitors to be an all too common occurrence.<sup>115</sup> It is reasonable to expect then, that the public availability of proprietary data would place rural ILECs at a competitive disadvantage if obtained by potential competitors, thereby jeopardizing future broadband deployment and upgrade efforts. Therefore, any proprietary data collected should be used only for the sole purpose of informing the FCC's decisions on broadband policy, and should remain confidential.

---

<sup>112</sup> BDIA, §103(a).

<sup>113</sup> *For example*, OPASTCO comments, GN Docket No. 07-45 (fil. May 16, 2007), pp. 3-4; CTIA comments, GN Docket No. 07-45 (fil. May 16, 2007), pp. 5-6; OPASTCO comments, GN Docket No. 04-54 (fil. May 10, 2004), pp. 3-4; National Cable and Telecommunications Association, GN Docket No. 04-54 (fil. May 10, 2004), pp. 4-7.

<sup>114</sup> NOI, 24 FCC Rcd 4380, ¶120.

<sup>115</sup> OPASTCO reply comments, MB Docket No. 06-189 (fil. Dec. 29, 2006), pp. 13-14; OPASTCO reply comments, MB Docket No. 05-255 (fil. Oct. 11, 2005), p. 6.

## **VII. THE MUNICIPAL PROVISION OF BROADBAND IS NOT NECESSARY IN AREAS SERVED BY RURAL ILECS**

The NOI seeks comment on the efficacy of encouraging the development of municipal broadband projects that compete with private enterprise.<sup>116</sup> As previously stated, OPASTCO members have made the investments necessary to offer quality, affordable broadband services to the vast majority of their customers. And, as noted in Section III, *supra*, by making certain updates to the rural High-Cost Program, the Commission can provide rural ILECs with the cost recovery necessary to deliver broadband to the highest-cost customers that remain unserved as well as better enable them to meet the growing demands for higher bandwidth connections. Given rural ILECs' record of success in deploying broadband in their sparsely-populated service areas, the Commission should recognize that municipal provision of broadband is not necessary in rural service areas.

Municipal entry should be viewed with caution in any event. Municipalities have several inherent characteristics that discourage private investment, should the municipality choose to enter the broadband market. Municipalities often have tax advantages not shared by private broadband providers; in fact, municipalities often function as tax collectors. In addition, municipalities often grant franchises, and have the ability to demand substantial fees from competitors. Municipalities also grant, and charge for, rights-of-way to broadband providers, which presents another potential conflict of interest. Finally, municipalities have a lower cost of obtaining capital, and have the ability to cross-subsidize their broadband services with general tax revenues or income from municipally-owned utilities. If municipal entry occurs at all, there should

---

<sup>116</sup> NOI, 24 FCC Rcd 4374, ¶95.

be safeguards in place to ensure that there is no cross-subsidization of tax or utility revenue, or discrimination of any kind against private sector investment in terms of rights-of-way, franchising, or tax collections.

### **VIII. RETRANSMISSION CONSENT AND OTHER VIDEO ACCESS RULES SHOULD BE REFORMED EXPEDITIOUSLY BECAUSE BUNDLING VIDEO SUBSCRIPTION SERVICES WITH BROADBAND HELPS TO SPUR BROADBAND ADOPTION**

The NOI asks what factors affect consumers' choices regarding broadband.<sup>117</sup> While video-enabled applications and “over-the-top” video services are growing in popularity,<sup>118</sup> traditional video subscription services, when bundled along with broadband, remain one of the most potent drivers of broadband adoption and, subsequently, deployment. The Commission has recognized that there is a connection between access to video content and broadband deployment, stating that “...a provider’s ability to offer video service and to deploy broadband networks are linked intrinsically....”<sup>119</sup> And in the Recovery Act, Congress recognized that demand stimulation is an important component of a strategy to extend broadband availability.<sup>120</sup> These findings are consistent with the experiences of rural ILECs that serve as both broadband providers and multichannel video programming distributors (MVPDs). When video is offered jointly with broadband services, the broadband subscription rates increase, which raises the number of consumers taking advantage of the numerous benefits that broadband Internet access can offer. Equally important, the rise in broadband subscribership provides rural ILECs with increased incentive and additional

---

<sup>117</sup> NOI, 24 FCC Rcd 4360, ¶52.

<sup>118</sup> See, Section II. C., *supra*.

<sup>119</sup> *Implementation of Section 621(a)(1) of the Cable Communications Policy Act of 1984 as amended by the Cable Television Consumer Protection and Competition Act of 1992*, MB Docket No. 05-311, Report and Order and Further Notice of Proposed Rulemaking, 22 FCC Rcd 5101, 5132-33, ¶62 (2007).

<sup>120</sup> Recovery Act, §6001(b)(5).

resources to invest in deploying broadband to additional rural consumers and to improve the quality (including speeds) of service where it is already offered.

However, rural ILECs face significant obstacles in obtaining access to the video content that rural consumers desire, and which may incent them to subscribe to bundled broadband and video packages. These obstacles include:

- outdated retransmission consent rules, which prevent rural ILECs from providing content to consumers at market-based rates;<sup>121</sup>
- forced carriage, where rural ILECs are required to purchase unwanted programming in order to offer “must have” content and is often imposed under the burdensome retransmission consent process;<sup>122</sup>
- the “terrestrial loophole,” which permits programmers to withhold certain programming from, or impose unreasonable conditions and charges on, small video providers and their customers;<sup>123</sup>
- video programmers that cite the use of shared head-ends as an excuse to deny access to content or impose unwarranted and burdensome financial or technological obligations;<sup>124</sup> and,
- abusive and predatory pricing practices.<sup>125</sup>

In addition to these challenges, a disturbing practice has emerged in recent years that further threatens the goals of greater consumer choice in the video market and more broadband investment in rural service areas. Some rural MVPDs that rely on Internet

---

<sup>121</sup> See, OPASTCO reply comments, MB Docket No. 06-189 (fil. Dec. 29, 2006), pp. 8-12; OPASTCO, the Independent Telephone and Telecommunications Alliance (ITTA), WTA, the Rural Independent Competitive Alliance (RICA) comments, MB Docket Nos. 07-29, 07-198 (fil. Jan. 4, 2008), pp. 8-12.

<sup>122</sup> See, OPASTCO, the National Telecommunications Cooperative Association (NTCA), RICA, and WTA *ex parte* letter, MB Docket No. 07-198 (fil. Aug. 15, 2008). See also, *Implementation of the Cable Television Consumer Protection and Competition Act of 1992, Development of Competition and Diversity in Video Programming Distribution: Section 628(c)(5) of the Communications Act: Sunset of Exclusive Contract Prohibition*, MB Docket No. 07-29, *Review of the Commission’s Program Access Rules and Examination of Program Tying Arrangements*, MB Docket No. 07-198, Report and Order and Notice of Proposed Rulemaking, 22 FCC Rcd 17791, 17862-17863, ¶120 (2007) (Program Tying NPRM).

<sup>123</sup> See, Coalition for Competitive Access to Content (CA2C) comments, MB Docket No. 07-198 (fil. Jan. 4, 2008), pp. 1-12.

<sup>124</sup> See, OPASTCO reply comments, MB Docket No. 06-189 (fil. Dec. 29, 2006), pp. 12-13.

<sup>125</sup> See, *Id.*, pp. 13-14.

protocol television (IPTV) technology are now being required to provide programmers with broadband subscription data. In order to obtain “must-have” content, the MVPD is required to pay an additional fee based on its number of broadband subscribers, regardless of whether or not these customers subscribe to video services. Some MVPDs are also required to promote programmers’ web sites.<sup>126</sup> Making the practice even more egregious is the requirement to submit payments for, and promote web sites to, broadband customers that not only do not subscribe to a carrier’s video service, but are also located outside of the MVPD’s service territory. Essentially, this amounts to forced payment on a per-customer basis for access to broadband content (regardless of whether or not the customer views it), in addition to video content. Broadband tying goes well beyond the realm of any reasonable condition for access to video content. As this practice is clearly abusive and anti-competitive, the Commission should take action to end it.

While parties may wish to negotiate packages that incorporate the optional tying of broadband content with video programming, programmers that have engaged in broadband tying have done so in a “take-it-or-leave-it” manner that violates the Commission’s “good faith” requirements.<sup>127</sup> If an alternative was eventually offered by a programmer, the rates involved were so prohibitive as to effectively force the MVPD to accept broadband tying or forgo the marquee content. Therefore, the mandatory tying of programming, as well as mandatory tying of broadband content with programming, should be precluded.

---

<sup>126</sup> Carriers are required to promote web sites through efforts such as prominent links, bill stuffers, advertising slots, etc. The web sites in question may be “walled gardens” containing exclusive content, presumably accessible to those online visitors whose IP addresses indicate that they are subscribers of a particular broadband provider.

<sup>127</sup> See, Program Tying NPRM, 22 FCC Rcd 17791, 17863-17864, ¶¶122-123 (citing *Implementation of the Satellite Home Viewer Act of 1999: Retransmission Consent Issues*, 15 FCC Rcd 5445 (2000)).

A number of broadband providers and consumer groups have pleaded with the Commission to reform and update retransmission consent and other video access rules for several years. For example, specific reforms to the retransmission consent regime, which would curtail forced tying and allow small MVPDs to negotiate lower prices on behalf of consumers from nearby markets, as well as obtain more relevant local news content, have been proposed.<sup>128</sup> In addition, closure of the terrestrial loophole would bring greater choice to consumers in the video market.<sup>129</sup> These reforms will not only lead to increased choices and lower rates for video consumers, but will also spur additional broadband investment in rural service areas.

## **IX. CONCLUSION**

To develop a national broadband plan that ensures that residents and businesses in rural service areas will have ongoing access to high-quality, affordable broadband capability, the Commission should:

- ensure that rural service areas have access to the same broadband speeds as urban areas, as well as access to robust and scalable wireline broadband technologies that can be upgraded to meet future bandwidth demands;
- make the definitions and standards for “broadband” in rural service areas the same as in urban areas and ensure that the definition keeps pace with the rapid evolution of technology and consumer demand;
- use the availability of high-quality, affordable wireline broadband services as the determining factor for whether consumers in rural service areas have access to broadband;
- recognize that wireline and wireless broadband technologies are complements, not substitutes;
- add broadband to the list of services supported by the High-Cost and Low Income universal service programs;

---

<sup>128</sup> See, American Cable Association comments, MB 07-198 (fil. Jan. 3, 2008), pp. 44-46. See also, NTCA comments, MB 07-198 (fil. Jan. 4, 2008), pp. 24-25.

<sup>129</sup> See, CA2C comments, MB Docket No. 07-198 (fil. Jan. 4, 2008), pp. 12-22.

- retain the embedded cost-based high-cost support system for rural ILECs;
- remove the cap on the HCLS mechanism;
- provide support for rural ILECs' high middle-mile transport costs;
- expeditiously reform intercarrier compensation and establish a mechanism to replace lost access revenues;
- establish a rebuttable presumption that it is not in the public interest to support multiple wireline broadband providers in a rural service area;
- secure the long-term sustainability of the High-Cost program by eliminating the identical support rule and expanding the base of contributors to include all facilities-based broadband Internet access providers;
- improve rural ILECs' ability to obtain wireless spectrum, declare data roaming to be a Title II service, and ban exclusive agreements between handset manufacturers and large wireless carriers;
- retain the 2005 Internet Policy Statement without supplementation, recognizing that the existing principles are sufficient to address discrimination;
- recognize that current federal and state broadband data reporting requirements, coupled with other data sources, are sufficient to measure broadband availability in rural service areas;
- acknowledge that there is no need for municipal entry in areas service by rural ILECs; and,
- expeditiously reform retransmission consent and other video access rules to better enable bundled video and broadband offerings that result in higher adoption rates.

Respectfully submitted,

**THE ORGANIZATION FOR THE  
PROMOTION AND ADVANCEMENT OF  
SMALL TELECOMMUNICATIONS COMPANIES**

By: /s/ Stuart Polikoff  
Stuart Polikoff  
Director of Government Relations

By: /s/ Stephen Pastorkovich  
Stephen Pastorkovich  
Business Development Director/  
Senior Policy Analyst

By: /s/ Brian Ford  
Brian Ford  
Regulatory Counsel

21 Dupont Circle NW  
Suite 700  
Washington, DC 20036  
(202) 659-5990

June 8, 2009

**CERTIFICATE OF SERVICE**

I, Brian Ford, hereby certify that a copy of the comments by the Organization for the Promotion and Advancement of Small Telecommunications Companies was sent via electronic mail, on this, the 8th day of June 2009, to those listed on the attached sheet.

By: /s/ Brian Ford  
Brian Ford

**SERVICE LIST**  
**GN Docket No. 09-51**  
**FCC 09-31**

**VIA E-MAIL**

Competition Policy Division  
Wireline Competition Bureau  
Federal Communications Commission  
Room 5-C140  
445 12<sup>th</sup> Street SW  
Washington, DC 20554  
[cpdcopies@fcc.gov](mailto:cpdcopies@fcc.gov)

Best Copy and Printing, Inc.  
[fcc@bcpiweb.com](mailto:fcc@bcpiweb.com)