

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

In the Matter of)	
)	
)	
Inquiry Concerning the Deployment of)	GN Docket No. 10-159
Advanced Telecommunications Capability to)	
All Americans in a Reasonable and Timely)	FCC 10-148
Fashion, and Possible Steps to Accelerate)	
Such Deployment Pursuant to Section 706 of)	
the Telecommunications Act of 1996, as)	
Amended by the Broadband Data)	
Improvement Act)	

**REPLY 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 reply comments in response to the Notice of Inquiry (NOI) in the above-captioned proceeding.¹ OPASTCO is a national trade association representing approximately 470 small Rate-of-Return (RoR) regulated rural incumbent local exchange carriers (RLECs). Its members, which include both commercial companies and cooperatives, together serve more than 3 million customers.

A survey of OPASTCO's members demonstrates that despite the challenges they face serving high-cost, sparsely populated areas, RLECs are generally making at least

¹ *Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996, as Amended by the Broadband Data Improvement Act*, GN Docket No. 10-159, Seventh Broadband Deployment Notice of Inquiry, FCC 10-148 (rel. Aug. 6, 2010) (NOI).

basic levels of broadband available to most of the consumers in their territories.

However, Commission action is necessary in order to achieve the mandates of both section 254 of the Telecommunications Act of 1996 (the Act), which requires that rural consumers have access to services and rates that are reasonably comparable to those enjoyed by other consumers, and section 706 of the Act, which directs the Commission to reduce barriers to investment to ensure that all consumers have access to broadband services in a reasonable and timely manner. These actions include: (1) declining to impose any additional caps on RLECs' existing high-cost support; (2) permitting RLECs to remain RoR regulated; (3) expanding the base of Universal Service Fund (USF) contributors to include, at a minimum, all broadband Internet access providers so that the High Cost program can be appropriately sized to achieve "reasonably comparable" ubiquitous broadband deployment in rural areas; and (4) reforming the intercarrier compensation rules to eliminate arbitrage and provide RLECs with a sufficient revenue replacement mechanism. In addition, the record in this proceeding shows that the Broadband Assessment Model that was used in the development of the National Broadband Plan (NBP) is highly flawed. Therefore, it should not be used to determine if broadband is being deployed in a reasonable and timely fashion, or to determine high-cost USF support levels for RLECs. Finally, the Commission should recognize that mobile broadband networks cannot serve as viable substitutes for scalable, fixed broadband networks.

II. OPASTCO SURVEY DATA ALONG WITH THE RECORD IN THIS PROCEEDING DEMONSTRATE THAT COMMISSION ACTION IS REQUIRED TO ENSURE THAT CONSUMERS IN RLEC SERVICE AREAS HAVE ACCESS TO “REASONABLY COMPARABLE” BROADBAND SERVICES IN A REASONABLE AND TIMELY MANNER

The NOI requests data from commenting parties related to the deployment of advanced services.² A recent OPASTCO survey of its membership demonstrates that RLECs continue to make broadband available on a widespread basis.³ On average, survey respondents are able to deliver at least a basic level of broadband service to over 96 percent of the consumers in their service area. Roughly 58 percent offer advertised “up to” speeds between 1 and 4 megabits per second (Mbps) downstream, while 47 percent offer advertised download speeds in excess of 4 Mbps. Approximately 58 percent offer advertised upload speeds of up to 1 Mbps.⁴ Average broadband penetration among survey respondents is 46 percent. However, these adoption figures vary widely, from a low of 10 percent to a high of 100 percent. Only 14 percent of respondents have deployed fiber-to-the-home to at least some portion of their service area.⁵

This survey data illustrates that, in the face of numerous operational challenges, RLECs are generally making at least basic levels of broadband available throughout most of their high-cost and hard-to-serve territories. Nevertheless, much more investment must occur, in a reasonable and timely manner, in order for all consumers in these areas

² NOI, ¶ 23.

³ OPASTCO commenced a survey of its membership in June 2010. Surveys were sent to 345 members; some of the recipients were contacts for multiple operating companies. With 215 responses received, the response rate was 62 percent.

⁴ The Commission has observed that the actual download speeds experienced by consumers of fixed broadband networks is usually approximately 40 to 50 percent of the advertised “up to” speed, while the actual upload speed typically reaches approximately 45 percent of the advertised “up to” speed. *See* Connecting America: The National Broadband Plan (rel. Mar. 16, 2010) (NBP), pp. 21-22.

⁵ Previous OPASTCO surveys have shown higher figures for fiber-to-the-home deployments. The difference may be explained by earlier surveys’ lower response rates, which were typically in the 20 to 25 percent range, compared to the 62 percent response rate seen in the most recent survey.

to have ongoing access to broadband services that are reasonably comparable in quality and price to those enjoyed by other consumers. As OPASTCO discussed in greater detail in its initial comments, among the specific steps the Commission should take to spur continued broadband investment in RLEC service areas and further the goals of sections 254 and 706 of the Act are: (1) decline to impose any additional caps on RLECs' existing high-cost support;⁶ (2) permit RLECs to remain RoR regulated;⁷ (3) expand the base of USF contributors to include, at a minimum, all broadband Internet access providers so that the High Cost program can be appropriately sized to achieve "reasonably comparable" ubiquitous broadband in rural areas;⁸ and (4) reform the intercarrier compensation rules to eliminate arbitrage and provide RLECs with a sufficient revenue replacement mechanism.⁹

With regard to the issue of RoR regulation, several commenters agreed with OPASTCO that this form of regulation has been highly successful in enabling RLECs to make broadband services available to a large portion of their customer base.¹⁰ Thus, adoption of the NBP's recommendation to require RoR carriers to shift to incentive

⁶ OPASTCO, pp. 7-8.

⁷ *Id.*, pp. 9-10.

⁸ *Id.*, pp. 4-7; 10-11. Broadband Internet access services are growing both in terms of connections and the revenues they generate. Thus, including these providers as contributors will sustain the USF for the long term. Specifically, it will help to minimize the USF fee that is passed through on each of the communications services that are subject to a contribution requirement, while also permitting the growth in the Fund that is necessary to achieve the statutory goals of sections 254 and 706. *See* Joint Comments of OPASTCO, the National Exchange Carrier Association (NECA), the National Telecommunications Cooperative Association (NTCA), the Western Telecommunications Alliance (WTA), the Rural Alliance, and 38 concurring state associations, WC Docket No. 10-90, GN Docket No. 09-51, WC Docket No. 05-337 (fil. Jul. 12, 2010) (Associations' Joint Comments), pp. 59-63; Joint Reply Comments of OPASTCO, NECA, NTCA, WTA, the Rural Alliance, and 41 concurring state associations, WC Docket No. 10-90, GN Docket No. 09-51, WC Docket No. 05-337 (fil. Aug. 11, 2010) (Associations' Joint Reply Comments), pp. 28-33.

⁹ OPASTCO, pp. 11-12.

¹⁰ NTCA, pp. 8-10; Oregon Telecommunications Association, pp. 3-6.

regulation¹¹ would remove the financial stability that has enabled RLECs' broadband investments to date and undercut their ability to achieve the objectives set forth in sections 254 and 706 of the Act. OPASTCO's survey data, along with the record in this proceeding, demonstrates that RLECs should be permitted to retain RoR regulation, which has been integral to promoting prudent, incremental broadband investment in rural service areas.

III. THE RECORD DEMONSTRATES THAT THE BROADBAND ASSESSMENT MODEL IS HIGHLY FLAWED AND SHOULD THEREFORE NOT BE USED TO DETERMINE IF BROADBAND IS BEING DEPLOYED IN A REASONABLE AND TIMELY FASHION OR TO DETERMINE RLEC HIGH COST SUPPORT LEVELS

The NOI seeks comment on the Broadband Assessment Model (Model), which was created to estimate broadband availability and its relationship to the Commission's responsibilities under section 706.¹² As discussed further below, numerous commenters provided detailed evaluations of the Model's estimates, and the record clearly demonstrates that the Model's flaws are pervasive and severe. Thus, neither the Model, nor any maps derived from it, should be used to determine whether broadband is being deployed in a reasonable and timely fashion. Similarly, the Model should not be used to inform the Commission's decisions in other matters, including, most importantly, determining RLECs' levels of high-cost universal service support.

The Blooston Rural Carriers note that the Model is "rife with shortcomings" and tends to produce inaccurate results when applied to sparsely populated areas that are characteristic of the territories served by RLECs.¹³ The Blooston Rural Carriers observe

¹¹ NBP, p. 147.

¹² NOI, ¶¶11-12.

¹³ Blooston Rural Carriers, p. 2.

that these inaccurate results go on to “corrupt other tools upon which the Commission intends to rely, such as the National Broadband Maps.”¹⁴ Accordingly, the Blooston Rural Carriers correctly submit that the Model’s shortcomings lead it to undermine the Commission’s ability to meet its responsibilities under section 706.¹⁵

In addition, ADTRAN, Inc. provides detailed analyses regarding the Model’s network usage and load capacity assumptions.¹⁶ For instance, ADTRAN’s analyses show that the Model’s assumptions regarding mobile networks’ data capacity could be off by as much as a factor of five.¹⁷ ADTRAN’s assessments also demonstrate that the Model “includes several material assumptions that are unsupported, in conflict with generally accepted industry data, and/or internally inconsistent.”¹⁸ These issues with the Model subsequently “throw doubt upon the maps at Broadband.gov.”¹⁹

NTCA details several concerns that further illustrate why the Model, and any maps derived from it, should not be used to draw conclusions in this or other proceedings. Specifically:

- The Model incorporates a number of faulty assumptions regarding the extent to which particular areas are “unserved;”²⁰
- the Model utilizes flawed processes to determine the cost of extending existing facilities;²¹
- the Model has not been statistically validated;²²

¹⁴ *Id.*, p. 1.

¹⁵ *Id.*

¹⁶ ADTRAN, pp. 5-11.

¹⁷ *Id.*, p. 11. This underscores shortcomings with mobile networks’ capacity as discussed in Section IV, below.

¹⁸ *Id.*, p. 5.

¹⁹ *Id.*, p. 11.

²⁰ NTCA, p. 5.

²¹ *Id.*

²² *Id.*, p. 6.

- middle-mile capacity was not an included variable in the Model;²³ and
- the Model's net present value approach to estimating costs of providing broadband service ignores that cost recovery is spread over the in-service life of equipment, and that networks constructed on a 4 Mbps downstream/1Mbps upstream availability target (the target assumed by the Model) will be quickly outmoded.²⁴

Free Press provides a further examination of the Model's target speeds, illustrating that 4/1 Mbps is insufficient for the Commission to meet its statutory obligations under section 706. This is due to the fact that section 706 specifically mentions certain capabilities or circumstances that must be accommodated. In particular, Free Press states that under section 706, high-quality video, symmetrical communications, and the requirements of individual users (as opposed to households) must all be taken into account, and that the 4/1 Mbps target cannot accommodate these bandwidth-intensive needs.²⁵

Given the Model's well-documented flaws, as well as the demonstrated inadequacy of its speed targets, the Model should not be used as a basis for determining if broadband services are being deployed to all Americans in a reasonable and timely manner. For the same reasons, the Commission should also not use the Model for other purposes, including, most importantly, for determining RLECs' high-cost universal support levels.

²³ *Id.*

²⁴ *Id.*

²⁵ Free Press, pp. 5-8.

IV. THE COMMISSION SHOULD RECOGNIZE THAT MOBILE BROADBAND SERVICES ARE NOT VIABLE SUBSTITUTES FOR ROBUST FIXED BROADBAND SERVICES

The Commission should dismiss arguments that mobile broadband services can function as viable substitutes for more robust, scalable fixed broadband services.²⁶ The mobile wireless industry itself points out that wireless users must share limited spectrum, and that mobile networks are constrained by physical capacity limits. As CTIA has explained to the Commission:

- The capacity of a wireless cell site is shared between all users in that cell. The wireless user must share the available bandwidth with other users in their vicinity.
- The capacity of a cell is shared between all services running over the network. Wireless voice and data use share the finite capacity of the cell.
- Wireless providers cannot “build their way out” of spectrum constraints. Unlike wired services that can add capacity through greater buildout, constraints on expansion of network capacity are a reality for spectrum-based services.²⁷

Thus, the mobile wireless industry has demonstrated that the ability of mobile broadband networks to keep pace with the evolving bandwidth needs of consumers²⁸ are inherently inhibited due to limited capacity and lack of scalability. Furthermore, mobile networks are ultimately dependent upon landline networks to function.²⁹ For these reasons, mobile networks are not equipped to fulfill the carrier of last resort responsibilities undertaken by RLECs.³⁰

²⁶ *See, e.g.*, Verizon-Verizon Wireless, Attachment I, Statement of Michael D. Topper, pp. 37-38.

²⁷ CTIA, *Notice of Ex Parte Presentation*, GN Docket No. 09-191 and WC Docket No. 07-52 (fil. Sept. 17, 2010), Attachment, p. 3.

²⁸ The Commission has observed that the average advertised speed purchased by broadband users has grown approximately 20 percent each year for the last decade. *See* NBP, p. 20.

²⁹ Associations’ Joint Reply Comments, p. 37.

³⁰ Associations’ Joint Comments, pp. 12-13. The NBP wisely recommends allowing only one carrier per service area, at most, to be eligible for support from the Connect America Fund (CAF) and subjecting that carrier to a broadband provider-of-last-resort obligation. However, while the NBP would make mobile wireless providers eligible for support from the CAF, the inherent deficiencies of their network capacities

There is no debating that rural consumers should have access to complementary mobile broadband services, just as other consumers do.³¹ However, if rural consumers are to benefit from all of the same transformational bandwidth-intensive applications and services that are available to other consumers, then mobile broadband needs to be recognized as a complement to, not a substitute for, fixed broadband. Due to their inherent constraints, mobile wireless providers should not qualify for support under the Connect America Fund, or whatever successor mechanism is used to support broadband providers-of-last-resort in rural areas.

V. CONCLUSION

The record in this proceeding demonstrates that Commission action is required to ensure that RLEC customers have access, in a reasonable and timely manner, to broadband services that are reasonably comparable to those enjoyed by other consumers. This includes: (1) declining to impose any additional caps on RLECs' existing high-cost support; (2) permitting RLECs to remain RoR regulated; (3) expanding the base of USF contributors to include, at a minimum, all broadband Internet access providers so that the High Cost program can be appropriately sized to achieve "reasonably comparable" ubiquitous broadband availability in rural areas; and (4) reforming the intercarrier compensation rules to eliminate arbitrage and provide RLECs with a sufficient revenue replacement mechanism. The record also shows that the Broadband Assessment Model is seriously flawed and should therefore not be used to determine if broadband is being

and their reliance on landline networks to function will preclude them from being able to fulfill a provider-of-last-resort role effectively. *See*, NBP, p. 145.

³¹ *See*, CTIA, p. 14; US Cellular, p. iii. The NBP reasonably suggests establishing a separate mobility fund that would further this goal, without undercutting the larger goal of maintaining viable providers-of-last-resort. *See*, NBP, p. 146.

deployed in a reasonable and timely fashion, or for other purposes, such as determining RLECs' high-cost USF support levels. Finally, the Commission should recognize that while mobile broadband networks can provide complementary services to scalable fixed broadband networks, they cannot serve as viable substitutes in the long term.

Respectfully submitted,

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

By: /s/ Stuart Polikoff
Stuart Polikoff
Vice President – Regulatory Policy
and Business Development

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

By: /s/ Brian Ford
Brian Ford
Regulatory Counsel

2020 K Street NW
7th Floor
Washington, DC 20006
(202) 659-5990

October 5, 2010

CERTIFICATE OF SERVICE

I, Stephen Pastorkovich, 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 5th day of October 2010, to those listed on the attached sheet.

By: /s/ Stephen Pastorkovich
Stephen Pastorkovich

SERVICE LIST
GN Docket No. 10-159
FCC 10-148

Stephen L. Goodman
Counsel for ADTRAN, Inc.
Butzel Long Tighe Patton, PLLC
1747 Pennsylvania Ave., NW, Suite 300
Washington, DC 20006

Benjamin H. Dickens, Jr.
Mary J. Sisak
Salvatore Taillefer, Jr.
Blooston, Mordkofsky, Dickens,
Duffy, & Prendergast, LLP
2120 L Street NW, Suite 300
Washington, DC 20037

Michael F. Altschul
Christopher Guttman-McCabe
Brian M. Josef
CTIA – The Wireless Association
1400 Sixteenth Street, N.W.
Suite 600
Washington, D.C. 20036

Adam Lynn
Free Press
501 Third Street, NW
Suite 875
Washington, DC 20001

Jill Canfield
Richard Schadelbauer
NTCA
4121 Wilson Boulevard, 10th Floor
Arlington, VA 22203

Richard A. Finnigan
Oregon Telecommunications
Association
777 13th St. SE, Suite 120
Salem, OR 97301

Grant Spellmeyer
United States Cellular Corporation
8410 West Bryn Mawr
Chicago, IL 60631

David A. LaFuria
Steven M. Chernoff
John Cimko
Counsel for US Cellular
Lukas, Nace, Gutierrez & Sachs, LLP
8300 Greensboro Drive, Suite 1200
McLean, VA 22102

Edward Shakin
William H. Johnson
Christopher M. Miller
Verizon
1320 North Court House Road, 9th Floor
Arlington, Virginia 22201

John T. Scott, III
William D. Wallace
Verizon Wireless
1300 I Street N.W., Suite 400 West
Washington, DC 20005

Best Copy and Printing, Inc.
fcc@bcpiweb.com