

TABLE OF CONTENTS

SUMMARY.....	i
I. INTRODUCTION.....	1
II. GENERAL OBJECTIVES FOR BROADBAND DEPLOYMENT.	3
III. BROADBAND GOALS AND BENCHMARKS.....	7
A. Defining Broadband Capability.....	7
B. Middle Mile Special Access Infrastructure and Facilities.....	10
IV. EFFECTIVE AND EFFICIENT MECHANISMS FOR ENSURING BROADBAND ACCESS.....	11
A. Existing Mechanisms.....	12
B. Market Mechanisms.....	14
C. Determining Costs.	16
V. UNIVERSAL SERVICE PROGRAMS AND BROADBAND.....	18
A. High-Cost Mechanism.....	18
B. Treating Broadband as a Supported Service.....	21
C. Access to Broadband by Lower-Income Consumers.....	23
D. Priority for Unserved and Underserved Areas.....	24
E. Provision of Support to Multiple Providers.....	27
VI. A NEW FRAMEWORK FOR BROADBAND SUPPORT.	29
VII. CONCLUSION.....	31

SUMMARY

Congress, in the American Recovery and Reinvestment Act of 2009, has charged the Commission with the task of seeking “to ensure that all people of the United States have access to broadband capability”

As the Commission undertakes its development of a national broadband plan, the Rural Cellular Association believes that a critical component of the Commission’s effort to fulfill the congressional mandate should be a strategy for achieving ubiquitous access to broadband networks in unserved and underserved areas throughout the Nation. Incorporating such a strategy into the national broadband plan will not only close the digital divide between rural communities and the rest of the country, but will also bring significant economic, educational, public safety, homeland security, and other benefits to the entire country.

In its pursuit of universal broadband access, the national broadband plan should develop mechanisms to promote the deployment of mobile wireless broadband networks in unserved and underserved areas, reflecting the Commission’s recognition that mobile wireless broadband has unique features and capabilities well-tailored to bring broadband to rural and high-cost areas.

A central part of the Commission’s strategy should be the revamping of existing Universal Service Fund support mechanisms so that they are directly targeted to fund broadband deployment. Utilizing restructured USF mechanisms offers an efficient and stable means of funding the construction of broadband infrastructure. The national broadband plan should call for a USF restructuring focused on the following general objectives:

- Respond to consumers’ preferences for mobile services and broadband services.
- Ensure the affordability of broadband services for all consumers, by meeting the service and rate comparability principles of the Telecommunications Act of 1996.

- Account for, and take full advantage of, the important role that wireless technologies can play in expanding the country's broadband capabilities, especially in rural and high-cost areas.

In order to advance these general objectives, the Commission's national broadband plan also should endorse specific steps for overhauling the USF funding mechanisms to support broadband services. These steps should include:

- Merging the existing rural and non-rural support mechanisms into a single high-cost support mechanism that uses a forward-looking economic cost model for the disbursement of support.
- Defining "reasonably comparable" rates and services, and "sufficient" universal service support, in a way that accommodates and advances the deployment of broadband services in rural and high-cost areas.
- Making broadband, including mobile wireless broadband, a supported service that is eligible for high-cost support and other USF support.
- Enhancing access to broadband for low-income consumers by subsidizing broadband service and subscriptions through the Lifeline and Link-Up programs.
- Targeting USF high-cost funding for broadband deployment in unserved and underserved areas, in order to overcome the current lack of broadband networks, including mobile broadband networks, in many rural communities.
- Continuing Commission policies that rely on competition as the best means of making broadband services universally available in rural and high-cost areas.

Finally, RCA believes that, as the Commission reworks its universal service program to make it a vehicle for bringing access to broadband capability to all the people of the United States, the Commission should focus on a central goal: stop funneling high-cost support to outmoded and expensive networks that are used to provide voice-grade plain old telephone service, and instead shift this support to the deployment of broadband networks, including mobile wireless broadband networks. This redistribution of funding will move USF support mechanisms out of the past and into the future, benefiting all Americans by delivering broadband's expanding array of capabilities and services.

**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 RURAL CELLULAR ASSOCIATION

Rural Cellular Association (“RCA”), by counsel, hereby provides comments on the Notice of Inquiry¹ adopted by the Commission with regard to the Commission’s development of a national broadband plan.²

RCA is an association representing the interests of nearly 100 small and rural wireless licensees providing commercial services to subscribers throughout the Nation and licensed to serve over 80 percent of the United States. Most of RCA’s members serve fewer than 500,000 customers. Several of RCA’s members have received eligible telecommunications carrier (“ETC”) status and are currently receiving high-cost support.

I. INTRODUCTION.

RCA welcomes this opportunity to participate in the effort to develop a national broadband plan, and agrees with the Commission that “there is much work to be done.”³ RCA believes that the Commission’s work, in large part, should focus on developing effective ways to spur the deployment of broadband, including mobile wireless broadband, in unserved and underserved areas throughout the Nation. The Commission, most recently in the Acting Chairman’s

¹ *A National Broadband Plan for Our Future*, GN Docket No. 09-51, Notice of Inquiry, 24 FCC Rcd 4342 (2009) (“*Notice*”).

² See FCC Press Release, “FCC Launches Development of National Broadband Plan,” GN Docket No. 09-51 (rel. Apr. 8, 2009).

³ *Notice*, 24 FCC Rcd at 4343 (para. 3).

Rural Broadband Strategy Report,⁴ has highlighted the fact that consumers in rural America “are being left behind” as the rest of the Nation relies increasingly on broadband communications.⁵ The national broadband plan should call for the mobilization of efforts to reverse this trend and to eliminate the broadband gap between rural areas and the rest of the country.

As RCA will discuss in the following sections, a central part of such efforts should be a revision of the Commission’s universal service support programs to shift their focus to broadband deployment. The goal of ubiquitous access to broadband services in rural and high-cost areas will become more attainable after the Commission recasts its universal service programs to more extensively support advanced technologies, such as mobile wireless broadband, that can bring affordable high-speed broadband services to rural communities.

In the following sections, RCA will first present some general objectives that it suggests should be encompassed in the national broadband plan, including a roadmap for revising universal service support mechanisms. RCA will then comment on a range of specific issues and questions raised by the Commission in the *Notice*, including broadband capacity definitions, middle mile special access facilities, existing mechanisms used to ensure broadband access, the operation of market mechanisms in facilitating broadband access, and broadband technologies that can efficiently deliver services in unserved and underserved areas.

RCA will next focus specifically on universal service issues and questions raised in the *Notice*, including the modification of high-cost support mechanisms, whether broadband should be treated as a supported service, ways of improving broadband access for lower-income consumers, giving priority to unserved and underserved areas with regard to broadband deployment,

⁴ Michael J. Copps, Acting Chairman, FCC, BRINGING BROADBAND TO RURAL AMERICA: REPORT ON A RURAL BROADBAND STRATEGY (May 22, 2009) (“RURAL BROADBAND STRATEGY REPORT”).

⁵ *Id.* at para. 2.

and whether support should be provided to multiple competitive broadband service providers as a means of enhancing broadband deployment in unserved and underserved areas.

Finally, RCA will sketch a possible new framework for broadband support, suggesting that the Commission should consider replacing existing funding structures with a new funding program that focuses principally on supporting the deployment of broadband networks, including mobile wireless broadband networks.

II. GENERAL OBJECTIVES FOR BROADBAND DEPLOYMENT.

A central focus of the Commission’s national broadband plan should be the development of strategies and programs designed to make broadband universally available. As broadband infrastructure continues to eclipse the old copper-wire voice network, it becomes increasingly important for the Commission to meet the challenge to make broadband available, so far as possible, to all the people of the United States.⁶

Making broadband services available in unserved and underserved areas throughout the Nation will help vanquish the digital divide⁷ by ensuring that *all* consumers—not just those living in urban or suburban areas or those with high incomes—have access to the benefits and services that are delivered through broadband infrastructure. Enormous short-term and long-term

⁶ See Section 1 of the Communications Act of 1934 (“Act”), 47 U.S.C. § 151; American Recovery and Reinvestment Act of 2009, Pub. L. No. 111-5, 123 Stat. 115 (2009) (“Recovery Act”), § 6001(k)(2) (instructing the Commission to develop a national broadband plan that “shall seek to ensure that all people of the United States have access to broadband capability”).

⁷ See, e.g., *Unlicensed Operation in the TV Broadcast Bands, Additional Spectrum for Unlicensed Devices Below 900 MHz and in the 3 GHz Band*, ET Docket No. 04-186, ET Docket No. 02-380, Second Report and Order and Memorandum Opinion and Order, 23 FCC Rcd 16807, 16933 (2008) (Statement of Commissioner Deborah Taylor Tate Approving in Part and Dissenting in Part) (arguing in favor of the facilitation of “services, including broadband, to rural areas [to] help reduce the digital divide that is far too prevalent in rural communities across our nation”).

benefits will flow from a national broadband plan that spearheads universal broadband deployment.⁸

In this regard, RCA is encouraged by the Commission's indication that it "expect[s] that the rural broadband strategy developed in [GN Docket 09-29] will inform our effort to develop a comprehensive national broadband plan pursuant to the Recovery Act."⁹ In addition, Acting Chairman Copps has stated that he views the report on rural broadband strategy recently submitted to Congress "as a prelude to, and building block for, the national broadband plan"¹⁰ The Acting Chairman has further indicated that the rural broadband report "provides another, critical step in the Commission's efforts to develop an effective, efficient and achievable national broadband plan."¹¹ RCA believes that programs to promote and facilitate broadband deployment in rural and high-cost areas should be a major component of the Commission's national broadband plan.

⁸ See, e.g., Letter from Larry Cohen, President, Communications Workers of America, to Nancy Pelosi, Speaker of the House of Representatives, U.S. House of Representatives & Harry Reid, Senate Majority Leader, U.S. Senate (filed Dec. 9, 2008), at 1:

Every \$5 billion invested in broadband infrastructure will create 100,000 jobs directly in the telecommunications, information technology, and computer sectors and a total of 2.5 million jobs throughout the entire economy in the near-term. It also will accelerate the build-out of America's advanced communications networks to assure economic growth, global competitiveness, innovation, and job creation over the long-term.

Deployment of universal, affordable broadband also generates significant additional benefits such as reducing health care costs, addressing our energy crisis, and improving education and the delivery of government services.

⁹ *Comment Date Established for Report on Rural Broadband Strategy*, GN Docket No. 09-29, Public Notice, 24 FCC Rcd 2987, 2987 (2009) ("*Rural Broadband Public Notice*") (citing the Recovery Act); see *Notice*, 24 FCC Rcd at 4377 (para. 109).

¹⁰ FCC Press Release, "FCC Acting Chairman Copps Releases Report on Broadband Strategy for Rural America," GN Docket No. 09-29 (rel. May 27, 2009), at 2 (internal quotations omitted).

¹¹ *Id.* (internal quotations omitted). See RURAL BROADBAND STRATEGY REPORT at para. 8 (stating that Acting Chairman Copps views the Report "as a prelude to, and a building block for, the national broadband plan").

The most expeditious and efficient way for the Commission to promote the ubiquitous deployment of broadband networks is for the agency to “reboot” its universal service support mechanisms so that these mechanisms are better vehicles for the advancement of the Commission’s broadband goals. Extending broadband into unserved and underserved areas requires considerable investment,¹² and the marketplace cannot be relied upon to generate the necessary levels of investment because sparse population densities and similar factors make such investment uneconomic.¹³

These problems can be overcome in part by retailing the Universal Service Fund (“USF”) high-cost mechanisms to promote broadband deployment. For example, while mobile wireless carriers have made substantial strides in deploying high-speed lines,¹⁴ they continue to face significant challenges in their efforts to bring broadband services to rural and high-cost ar-

¹² See RURAL BROADBAND STRATEGY REPORT at para. 113 (footnote omitted) (stating that “rural networks can often be even more expensive to deploy and potentially more expensive to maintain than networks in non-rural areas for a variety of reasons, which can serve as a formidable barrier to rural broadband deployment”).

¹³ See *id.* at para. 13 (stating that “[r]elying on market forces alone will not bring robust and affordable broadband services to all parts of rural America”); *id.* at para. 117 (footnote omitted):

Although the free market has many benefits, such as driving down the costs of services for consumers and improving service quality, it also can leave behind geographic areas with high costs and lower profit potential. Such is the case with many rural areas. Market forces often demand returns commensurate with investment risk. In many parts of rural America, the relatively high deployment costs per potential customer make relying on market forces alone an inadequate strategy for promoting the deployment of broadband services.

¹⁴ For example, as of December 2007, mobile wireless service providers served more than 15 million customers with advanced service lines (uplink and downlink speeds of more than 200 kbps). See FCC, Wireline Comp. Bur., Indust. & Tech. Analysis Div., *High-Speed Services for Internet Access: Status as of December 31, 2007* (Jan. 2009), Table 2, accessed at http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-287962A1.pdf, cited in Comments of CTIA—The Wireless Association® (“CTIA”), Rural Broadband Strategy, GN Docket No. 09-29 (filed Mar. 25, 2009) (“CTIA Rural Broadband Comments”), at 3; FCC, *Moving Forward: Driving Investment and Innovation While Protecting Consumers* (Jan. 15, 2009) (“*Moving Forward Report*”), at 18 (footnotes omitted) (noting that “in each of the last three years, Verizon Wireless has invested \$6.5 billion or more to expand and advance its network nationwide. Since 2006, Sprint Nextel has invested more than \$15 billion in capital largely to enhance its networks.”).

eas.¹⁵ Retargeting USF high-cost support mechanisms would create a powerful engine to move broadband, including mobile wireless broadband, forward throughout rural America.

The national broadband plan should lay out a roadmap for overhauling the Commission's universal service mechanisms to make them more effective in accomplishing broadband deployment in unserved and underserved areas.¹⁶ This roadmap should be driven by three considerations.

First, revamped high-cost support mechanisms should reflect and accommodate consumer preferences for mobile services and broadband services. Support should follow consumer demand, instead of continuing to fund the operation and maintenance of outmoded and limited technologies.

Second, the Commission's national broadband plan should underscore the need to ensure that consumers in rural and high-cost areas are not left by the wayside. The overall objective of the national broadband plan should be to increase broadband capacity throughout the Nation, and

¹⁵ See, e.g., CostQuest Associates, *U.S. Ubiquitous Mobility Study* (Apr. 17, 2008), at 4 (submitted to CTIA) (estimating that an investment of \$22 billion would be needed to build out infrastructure to provide third generation ("3G") mobile wireless broadband on a ubiquitous basis, that approximately 16,000 new cell towers would need to be constructed, and that approximately 55,000 existing cell towers would need to be augmented with 3G technologies).

¹⁶ The Commission has recognized the importance of, and difficulties associated with, providing broadband services to consumers in rural and high-cost areas:

Broadband services have great potential to bring opportunity to the citizens of rural America. They improve the educational opportunities of children and adults everywhere, allowing children in rural areas across the country to access the same information as schoolchildren in urban areas. Telemedicine networks made possible by broadband services save lives and improve the standard of healthcare in sparsely populated, rural areas. For businesses in rural areas, access to broadband services is just as critical. These services are creating new jobs, while enabling skilled employees to work more effectively in their current jobs. At the same time, the Commission and the Department of Agriculture have recognized that rural consumers are doubly vulnerable: that is, although they are most in need of access to advanced telecommunications capability to overcome economic, educational and other limitations, they are also the most likely to lack access precisely because of these limitations.

Rural Broadband Public Notice, 24 FCC Rcd at 2987.

to make broadband more affordable for all consumers. Rural and high-cost areas must not be left out of this equation. The Commission’s national broadband plan therefore should explore ways in which broadband deployment can meet the reasonable comparability principle in Section 254(b)(3) of the Act.¹⁷

Third, the national broadband plan generally, and universal service funding mechanisms in particular, should focus on enhancing consumers’ access to mobile wireless broadband services. Forward-looking broadband policies are needed to make sure that the virtually limitless potential of broadband services is realized rather than stymied. Wireless technologies will play a critical role in the continuing development of the Nation’s communications capabilities,¹⁸ and the Commission’s national broadband plan should not only account for this role, but should also develop the means to take full advantage of wireless broadband.

III. BROADBAND GOALS AND BENCHMARKS.

RCA examines in this section options the Commission should consider in developing a definition of broadband capacity, and also discusses the relevance of “middle mile” services in connection with the Commission’s examination of access to broadband capability.

A. Defining Broadband Capability.

Short-term benefits will accrue from a national broadband plan that defines broadband capacity differently for different technologies. Over the longer term, differing definitions may become less necessary, to the extent that differences in the broadband speeds provided by differ-

¹⁷ 47 U.S.C. § 254(b)(3).

¹⁸ See, e.g., *Moving Forward Report* at 10 (stating that “[i]ncreasingly broadband is moving from a wireline to a wireless world”); Yu-Ting Wang, *Headwind, Benefits Seen in Rural Line Sales, Experts Say*, COMM. DAILY, May 18, 2009, at 3 (citing a telecommunications analyst’s view that current trends indicate that, someday, “the telcos will be all about wireless” and that investors would justifiably focus on wireless as the “whole story” for companies such as Verizon and AT&T) (internal quotations omitted).

ent technologies tend to narrow. This changing dynamic, with respect to wireless technologies as compared to landline networks, has been described by Acting Chairman Copps:

Wireless technologies are extending broadband into areas unreachable by cables and wires, and enabling consumers to be connected while on the move. . . . Wireless providers have been launching new broadband technologies that allow subscribers to access the Internet, while mobile, at speeds that are beginning to rival those on landline networks. We expect to see further advancements on the wireless broadband front as wireless service providers begin to build out networks using advanced technologies . . . that support data rates that may exceed 100 Mbps.¹⁹

Different broadband technologies currently have differing capabilities regarding achievable broadband speeds. The national broadband plan should favor the development of programs for broadband deployment that do not handicap service providers utilizing broadband infrastructure that currently provides capacity that is less than that available from other technologies.²⁰ For example, support for broadband deployment made available through the Commission's USF programs should accommodate mobile wireless broadband technologies by defining broadband in a manner that does not preclude carriers using these technologies from being eligible to receive high-cost support and support from other USF mechanisms.

There are sound policy reasons for such an approach. As RCA has previously observed, although mobile wireless technology currently provides less broadband capacity than some other broadband transmission networks, mobile wireless broadband has other characteristics that make it highly attractive for deployment in unserved and underserved areas.²¹ Mobility itself, of course, uniquely distinguishes this technology from other broadband technologies, and gives it

¹⁹ RURAL BROADBAND STRATEGY REPORT at para. 10 (footnotes omitted).

²⁰ See RCA Comments, American Recovery and Reinvestment Act of 2009 Broadband Initiatives, NTIA Docket No. 090309298-9299-01 (filed Apr. 13, 2009) ("RCA Broadband Comments"), at 26-27.

²¹ *Id.* at 27.

unparalleled appeal because consumers throughout rural America desire and depend upon mobile access to the Internet and to applications and services available via broadband connections.²²

In addition, mobile wireless broadband is well suited for deployment in unserved and underserved areas because it can be constructed and made operational faster and more cheaply than other broadband technologies.²³ Finally, enabling the full participation of mobile wireless broadband service providers as ETCs for purposes of receiving universal service support will be responsive to the increasing consumer demand for mobile wireless broadband services.²⁴

²² Wireless Broadband Access Task Force, FCC, CONNECTED & ON THE GO: BROADBAND GOES WIRELESS 36 (Feb. 2005) (“CONNECTED & ON THE GO”) (footnotes omitted), accessed at http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-257247A1.pdf:

Wireless broadband technologies that allow access to the Internet while traveling will greatly benefit consumers of broadband technology, particularly business consumers. Wireless broadband technologies that are supplied by transportation systems, as well as mobile phones that can serve as a mobile desktop computer, can also provide seamless broadband access, which is becoming increasingly necessary for many business consumers who travel frequently or experience long commutes.

²³ RCA Broadband Comments at 27. *See* CONNECTED & ON THE GO 13:

Wireless is a unique broadband solution for several reasons. These include providing both mobility and portability, efficiently connecting devices within short distances, and bridging longer distances more efficiently than wireline and cable technologies. . . . In addition, wireless technologies have the ability to reach geographic areas, particularly rural areas, that often cannot be efficiently served by other technologies. Because the deployment of wireless technologies does not require running copper, cable, or fiber lines to individual homes, the costs of deployment often are lower than those associated with these technologies. Further, wireless technologies frequently are a more cost-effective solution for serving areas of the country with less dense populations, and provide rural and remote regions new ways to connect to critical health, safety, and educational services.

²⁴ *See Moving Forward Report* at 19 (footnote omitted) (stating that “[i]n June 2005, just under 400,000 mobile wireless broadband-capable devices were in use in the United States. By June 2007, the number had grown to 35.3 million. In addition, the percentage of mobile devices with browser capabilities has risen from 22 percent to 75 percent from 2005 to 2008.”); NTIA, *Networked Nation: Broadband in America 2007* (Jan. 2008) at 18 (footnote omitted) (stating that, “[f]ueled in large part by demand for non-voice applications, e.g., video services, multimedia and text messaging, wireless games, and music), mobile broadband services have contributed significantly to the growth of the mobile wireless sector”), accessed at www.ntia.doc.gov/reports/2008/NetworkedNationBroadbandinAmerica2007.pdf.

In light of these considerations, RCA recommends that mobile wireless services providing downlink and uplink speeds of at least 200 kbps should be defined by the Commission as broadband services in unserved areas, and that mobile wireless services providing downlink speeds of at least 1 Mbps, and uplink speeds of at least 200 kbps, should be defined as broadband services in underserved areas.²⁵ These downlink and uplink thresholds would be consistent with the transmission capabilities of many wireless carriers currently providing mobile services in rural areas. As a result, the use of these thresholds would facilitate the eligibility of most wireless carriers to receive universal service funding to deploy broadband infrastructure and provide broadband services in unserved and underserved areas.

B. Middle Mile Special Access Infrastructure and Facilities.

The Commission asks about the extent to which its “consideration of access to broadband capability [should] take account of the middle mile.”²⁶ Middle mile special access telecommunications links play a central role in the availability and operation of virtually all telecommunications services.²⁷ Access to middle mile special access facilities is also critically important to

²⁵ See RCA Broadband Comments at 38.

²⁶ Notice, 24 FCC Rcd at 4347 (para. 17).

²⁷ Sprint Nextel has characterized the importance of middle mile special access facilities as follows:

Special access is the lifeblood of the telecommunications industry, both narrowband and broadband, and touches virtually every communications product. It is a critical part of the services consumers use every day. When consumers make wireless calls, access the Internet, send e-mails, swipe their credit cards at stores, or use automated teller machines, they are using services that rely on special access. Because of its central role in the deployment of mobile and fixed broadband services, reform of the current FCC regime governing incumbent local exchange carrier (LEC) special access services must be an urgent priority if Congress’s vision of universal, affordable access to broadband services is to become a reality.

An Examination of Competition in the Wireless Industry: Hearing Before the Subcomm. on Communications, Technology, and the Internet of the H. Comm. on Energy and Commerce, 111th Cong. (May 7, 2009), Written Testimony of Paul Schieber, Vice President, Access and Roaming, Sprint Nextel Corporation, at 2.

mobile wireless broadband service providers in connection with their deployment of wireless networks, and their provision of broadband services, in rural and high-cost areas.²⁸

Because of the importance of middle mile special access facilities, RCA encourages the Commission to include as part of its national broadband plan an examination of ways to facilitate access by broadband service providers, including mobile wireless broadband providers, to special access service available on reasonable terms and at reasonable prices. Successfully addressing these issues will be an important part of the design of an overall plan for ensuring that “all people of the United States have access to broadband capability”²⁹

IV. EFFECTIVE AND EFFICIENT MECHANISMS FOR ENSURING BROADBAND ACCESS.

In this section RCA responds to the Commission’s request for comments regarding how effective existing mechanisms have been in ensuring broadband access, whether marketplace

²⁸ See, e.g., *id.* at 2-3 (stating that middle mile “special access facilities are an essential input to every one of Sprint’s businesses—broadband, wireless, long distance, and enterprise[.]” and that “Sprint . . . needs middle mile transmission circuits to transport the customer’s traffic from the Sprint cell site to a mobile telephone switching office or another point on Sprint’s mobile backbone network and from there to Sprint’s Internet backbone network”); Howard Buskirk & Adam Bender, *Congress Pressuring FCC To Investigate Special Access Prices*, COMM. DAILY, May 19, 2009, at 1-2 (reporting Congresswoman Anna Eshoo’s statement that “[f]or wireless carriers the cost of special access carriage is up to a third of the expense of running a wireless tower Special access is a significant choke point in the telecommunications system since Verizon and AT&T control 80 to 90 percent of the special access market nationwide.”); RURAL BROADBAND STRATEGY REPORT at para. 114 (footnotes omitted):

Although rural broadband networks are fundamentally similar to broadband networks in non-rural areas in that they involve both a local access or distribution network and a backhaul component, rural broadband networks are also typically built in locations that are geographically more removed from Internet backbone nodes. In many cases, because of this more distant location, the rural broadband provider will need to obtain backhaul transport, or “middle mile” facilities, from more than one provider, often over facilities that were designed for voice telephone or cable television services. Some of these “middle mile” facilities may have insufficient capacity, causing the transmission speed on otherwise adequate last-mile broadband facilities to come to a crawl or stall before the data reach the Internet backbone.

²⁹ Recovery Act, § 6001(k)(2).

forces can be relied upon to deliver broadband services in rural areas, and which technologies can deliver broadband services effectively and efficiently.³⁰

A. Existing Mechanisms.

The Commission seeks comment on how effective and efficient its existing mechanisms have been in ensuring broadband access.³¹ In RCA's view, the Commission's universal service high-cost mechanisms have not always been effective in facilitating the deployment of broadband facilities, especially mobile wireless broadband networks, in rural and high-cost areas throughout the Nation. There are several reasons for these shortcomings.

As a general matter, the existing high-cost support mechanisms have sacrificed the pursuit of efficient deployment of broadband infrastructure in favor of continuing to support outmoded and obsolete copper-wire infrastructure designed to provide voice-grade plain old telephone service.³² The problems caused by the Commission's policy of providing disproportionately large amounts of universal service support to an outmoded technology, geared to the provision of voice service, have been compounded by the mechanism by which this support is disbursed. Specifically, rural incumbent LECs currently receive high-cost loop support and local switching support based upon their embedded costs of deploying, maintaining, and operating their copper-wire networks.

As RCA discusses below,³³ and as others have argued,³⁴ basing high-cost support on rural incumbent LECs' embedded costs gives the carriers the wrong incentives. Moreover, the Com-

³⁰ See *Notice*, 24 FCC Rcd at 4352-53 (paras. 36-38).

³¹ See *id.* at 4352-53 (para. 36).

³² See Section V.A., *infra*.

³³ See *id.*

³⁴ See, e.g., Comments of United States Cellular Corporation, High-Cost Universal Service Support, Federal-State Joint Board on Universal Service, WC Docket No. 05-337, CC Docket No. 96-45, (filed Nov. 26, 2008), at 24.

mission has stated that, “[i]n many cases, support is used to offset the increasing revenue losses to . . . incumbent carriers as the gap between legacy technology and more efficient technologies has widened.”³⁵ Thus, the existing embedded cost methodology used for the disbursement of high-cost funds to rural incumbent LECs is serving as a shield to protect these incumbents from their own inefficient technologies, investments, and operations. Establishing this perverse incentive, and thus rewarding carriers for their inefficiencies, also places upward pressure on the size of the high-cost fund.³⁶

Finally, the deficiencies of the Commission’s universal service high-cost mechanisms have been magnified by the agency’s decision last year to impose a cap on the amount of high-cost support received by competitive ETCs.³⁷ The interim cap violates the Commission’s principle of competitive neutrality³⁸ and also is not grounded in any demonstration by the agency that

³⁵ *High-Cost Universal Service Support, Federal-State Joint Board on Universal Service, Lifeline and Link Up, Universal Service Contribution Methodology, Numbering Resource Optimization, Implementation of the Local Competition Provisions in the Telecommunications Act of 1996, Developing a Unified Intercarrier Compensation Regime, Intercarrier Compensation for ISP-Bound Traffic, IP-Enabled Services*, CC Docket Nos. 96-45, 96-98, 99-68, 99-200, 01-92, WC Docket Nos. 03-109, 04-36, 05-337, 06-122, Order on Remand and Report and Order and Further Notice of Proposed Rulemaking, FCC 08-262 (rel. Nov. 5, 2008), 73 Fed. Reg. 66821, Nov. 12, 2008 (“*Universal Service Reform Further NPRM*”), App. B, Narrow Universal Service Reform Proposal, Order on Remand and Report and Order and Further Notice of Proposed Rulemaking (“*Narrow Universal Service Reform Proposal*”), at para. 3.

³⁶ See Don J. Wood, Ex Parte Filing in WC Docket No. 05-337 (filed Oct. 28, 2008) (submitted on behalf of NE Colorado Cellular, Inc.), at 2.

³⁷ *High-Cost Universal Service Support*, WC Docket No. 05-337, CC Docket No. 96-45, Order, 23 FCC Rcd 8834 (2008) (“*Interim Cap Order*”), appeal docketed, *RCA v. FCC*, Nos. 08-1284 & 08-1285 (D.C. Cir. Aug. 29, 2008).

³⁸ The core principle of competitive neutrality, which the Commission prescribed pursuant to Section 254(b)(7) of the Act, requires that universal service support mechanisms must not result in any unfair competitive advantage or disadvantage to any ETC. The Commission explained that it intends the principle to mean that “universal service support mechanisms and rules neither unfairly advantage nor disadvantage one provider over another, and neither unfairly favor nor disfavor one technology over another.” *Federal-State Joint Board on Universal Service*, CC Docket No. 96-45, Report and Order, 12 FCC Rcd 8776, 8801 (para. 47) (1997) (“*USF First Report and Order*”) (subsequent history omitted). In the *Interim Cap Order* the Commission conceded that the interim cap was not consistent with the agency’s own competitive neutrality principle, but it argued that the principle could be “reprioritized” and set aside temporarily because the cap was needed to avert a threat to the USF. But the Commission failed to demon-

growth in the size of high-cost support mechanisms necessitated such a precipitous and one-sided “remedy.”³⁹ Even worse, by sharply reducing the flow of high-cost support to wireless carriers, the interim cap has become an ongoing impediment to the deployment of mobile wireless broadband infrastructure in rural and high-cost areas across America, thus harming consumers who otherwise would benefit from access to mobile wireless broadband services and functionalities.

In addition to acting to repeal the interim cap on high-cost support disbursements to wireless ETCs, the Commission should endorse other actions in its national broadband plan that will cure the problems with existing mechanisms that RCA has outlined in this section. In addressing how universal service support mechanisms should be revamped to better promote broadband deployment and pursue the goal of broadband access for all Americans, the Commission should move away from funneling excessive levels of support for the preservation of aging copper-wire infrastructure that has little relevance or utility in the new broadband world. The agency also should ensure that, as it redirects its universal service funding toward the deployment of broadband networks, these new funding mechanisms should provide incentives for efficient operations and should make funding disbursements in a competitively and technologically neutral manner.

B. Market Mechanisms.

The Commission asks about “what lessons can be learned with regard to whether market forces can deliver broadband to rural areas”⁴⁰ Federal universal service policy has recog-

strate that there was any threat, or that the USF would become “unsustainable” in the future if a cap was not imposed. *See* Letter from Eric C. Peterson, Executive Director, RCA, *et al.*, to Acting Chairman Michael J. Copps, FCC (filed May 1, 2009), Attachment, RCA Position Paper, “Cut the Cap: The Commission Should Repeal the Interim Cap on High-Cost Universal Service Support Received by Wireless Carriers” (“RCA Position Paper”), at 16-17.

³⁹ *See* RCA Position Paper at 5-9.

⁴⁰ *Notice*, 24 FCC Rcd at 4353 (para. 37).

nized that competitive markets can accomplish a great deal in bringing a wide array of telecommunications services to consumers at reasonable prices,⁴¹ but the universal service program also represents an acknowledgment that competitive markets generally cannot take root on their own in rural areas where sparse population densities and other factors (such as difficult terrain) make investment in telecommunications infrastructure uneconomic in the absence of universal service support. The Commission has concluded, for example, that “[w]ithout the assurance of eligibility for universal service funding, it is unlikely that any non-incumbent LEC will be able to make the necessary investments to provide service in high-cost areas.”⁴²

Competition in rural markets provided by mobile wireless broadband providers can bring significant benefits to rural consumers, not only by providing the advantages of mobile broadband, but also by placing downward pressure on pricing for broadband service. Increased options for consumers, at lower prices, is the principal benefit delivered by competitive markets. Markets that are driven by competition have this effect because service providers that are capable of operating more efficiently than their competitors will tend to prevail, forcing their competitors to operate more efficiently or face declining market share. Consumers benefit from this competitive process.

⁴¹ See *Alenco Communications, Inc. v. FCC*, 201 F.3d 608, 616 (5th Cir. 2000) (“*Alenco*”).

⁴² *Federal-State Joint Board on Universal Service, Western Wireless Corporation Petition for Preemption of an Order of the South Dakota Public Utilities Commission*, CC Docket No. 96-45, Declaratory Ruling, 15 FCC Rcd 15168, 15176-77 (para. 21) (2000). See *id.* at 15178 (para. 23) (footnote omitted):

We believe that it is unreasonable to expect an unsupported carrier to enter a high-cost market and provide a service that its competitor already provides at a substantially supported price. If new entrants are not provided with the same opportunity to receive universal service support as the incumbent LEC, such carriers will be discouraged from providing service and competition in high-cost areas.

Because of these benefits provided by competitive markets—and because the Telecommunications Act of 1996⁴³ requires policies that promote competition in local exchanges—the Commission should adopt a national broadband plan that fosters universal service high-cost mechanisms designed to promote the deployment of mobile wireless broadband services in rural and high-cost areas. The Commission should ensure that high-cost funding is available for the deployment of mobile broadband on a competitively and technologically neutral basis because mobile broadband services are capable of providing significant benefits in rural and high-cost areas. As CTIA has observed, “[m]obility brings with it a level of convenience unmatched by fixed-line communications, bringing broadband to the person and allowing people to reach out and be reached wherever they may be located at any given moment[,]”⁴⁴ mobile wireless broadband is uniquely suited to serve areas with widely dispersed populations, and the availability of mobile broadband services has been recognized as a precondition for economic growth in rural areas.⁴⁵

C. Determining Costs.

The Commission inquires in the *Notice* regarding “[w]hich broadband technologies might work best and deliver the most effective, efficient services in various parts of the nation.”⁴⁶ This is an important issue, of course, because the national broadband plan should focus on devising means by which federal assistance, such as universal service support, can be most effectively utilized in aiding the deployment of broadband services to unserved and underserved areas. The

⁴³ Pub. L. No. 104-104, 110 Stat. 56 (1996) (“1996 Act”).

⁴⁴ CTIA Rural Broadband Comments at 4.

⁴⁵ *Id.* at 4-5.

⁴⁶ *Notice*, 24 FCC Rcd at 4353 (para. 38).

utilization of support can be enhanced to the extent it is directed toward the deployment of efficient technologies and network infrastructure.

Mobile wireless broadband technology compares favorably to other technologies with respect to the effective, efficient delivery of services in rural and high-cost areas. The Commission, for example, has noted that it “expect[s] that wireless broadband will play a critical role in ensuring that broadband reaches rural and underserved areas, where it may be the most efficient means of delivering these services.”⁴⁷ In addition, with respect to deploying mobile wireless broadband services in rural areas, Congress has recognized that “mobile broadband technologies are applicable to farmers, ranchers, and small rural business owners”⁴⁸ and that, although “[f]ixed broadband service will continue to be important in rural homes and offices, . . . mobile technologies also may have a role to play in expanding broadband access to rural residents.”⁴⁹

There can be little dispute that wireless broadband infrastructure in many cases is capable of operating more efficiently than legacy wireline technologies in bringing services to consumers in rural and high-cost areas, and that there are no compelling policy justifications to continue using universal service mechanisms to support outmoded wireline technologies.⁵⁰

⁴⁷ *Appropriate Regulatory Treatment for Broadband Access to the Internet over Wireless Networks*, WT 07-53, Declaratory Ruling, 22 FCC Rcd 5901, 5908 (para. 17) (2007). The Commission has also agreed with the suggestion that “wireless service may represent a cost-effective alternative to wireline service in sparsely populated, remote locations where the cost of line extensions is prohibitively expensive.” *Federal-State Joint Board on Universal Service; Promoting Deployment and Subscribership in Unserved and Underserved Areas, Including Tribal and Insular Areas*, CC Docket No. 96-45, Twelfth Report and Order, Memorandum Opinion and Order, and Further Notice of Proposed Rulemaking, 15 FCC Rcd 12208, 12237 (para. 56) (2000) (“*USF Twelfth Report and Order*”) (subsequent history omitted), *cited in* RCA Broadband Comments at 20.

⁴⁸ *Food, Conservation, and Energy Act of 2008*, Conference Report To Accompany H.R. 2419, H. R. RPT. NO. 110-627, at 834 (2008) (Conf. Rep.), *cited in* RCA Broadband Comments at 19.

⁴⁹ *Id.*

⁵⁰ *Cf. Narrow Universal Service Reform Proposal* at para. 3.

V. UNIVERSAL SERVICE PROGRAMS AND BROADBAND.

The Commission has sought comment “on the impact of broadband on our existing universal service programs”⁵¹ In the following sections, RCA will address this issue as well as specific questions raised by the Commission concerning the interplay between broadband and the agency’s universal service mechanisms, and will also demonstrate that these mechanisms need to be restructured in acknowledgment of the fact that “rural consumers have a right to expect the universal service system to ensure their access to wireless services [including mobile broadband services] that are ‘comparable’ to those provided in urban areas.”⁵²

A. High-Cost Mechanism.

The Commission has sought comment on “what modifications to [existing universal service] programs, if any, should be considered as part of a national broadband plan[,] . . . [and on] how these programs might be better targeted to address broadband deployment”⁵³ Focusing on the high-cost support mechanism, RCA proposes that this mechanism should be modified by the Commission in two respects.⁵⁴

First, the existing rural and non-rural mechanisms should be merged into a single high-cost support mechanism, and the new mechanism should disburse support based upon a forward-looking economic support model. The rural high-cost support mechanism should be replaced because it creates incentives for inefficient carrier operations. The Commission itself has consis-

⁵¹ *Notice*, 24 FCC Rcd at 4354 (para. 39).

⁵² CTIA Rural Broadband Comments at 8.

⁵³ *Notice*, 24 FCC Rcd at 4354 (para. 39).

⁵⁴ In a later section, RCA will also sketch some suggestions for a more sweeping overhaul of universal support mechanisms to accommodate and advance national broadband goals. See Section VI., *infra*.

tently expressed the view that “a support mechanism based on . . . a carrier’s embedded costs . . . provides no incentives for ETCs to provide supported services at the minimum possible costs.”⁵⁵

The Commission’s national broadband plan should recognize that the existing rural high-cost support mechanism continues to disburse substantial amounts of support to rural incumbent ETCs,⁵⁶ based upon a discredited and inefficient methodology, and that this approach is particularly unfair to the customers of wireless services because wireless carriers continue to account for a large portion of contributions to the federal USF.⁵⁷ Any national broadband plan seeking to accelerate the pace and extent of broadband deployment in unserved and underserved areas would be crippled from the start if the plan permitted universal service disbursement mechanisms to continue to be based upon an embedded cost funding methodology.

Using a forward-looking cost model to disburse funds from a merged high-cost support mechanism would be consistent with the Commission’s long-held view that “the proper measure of cost for determining the level of universal service support is the forward-looking economic

⁵⁵ *Federal-State Joint Board on Universal Service*, WC Docket No. 05-337, CC Docket No. 96-45, *Notice of Proposed Rulemaking*, 23 FCC Rcd 1495, 1500 (para. 11) (2008), *quoted in* Reply Comments of RCA, High-Cost Universal Service Support, Federal-State Joint Board on Universal Service, WC Docket No. 05-337, CC Docket No. 96-45, (filed June 2, 2008), at 38. *See USF First Report and Order*, 12 FCC Rcd at 8935 (para. 292):

[T]he 1996 Act’s mandate to foster competition in the provision of telecommunications services in all areas of the country and the principle of competitive neutrality compel us to implement support mechanisms that will send accurate market signals to competitors. We find that the current [embedded cost] support mechanisms neither ensure that ILECs are operating efficiently nor encourage them to do so. . . . Thus, we agree . . . that calculating high-cost support based on embedded cost is contrary to sound economic policy.

⁵⁶ In 2008, incumbent LECs received approximately 74.2 percent of high-cost disbursements. *See* Federal-State Joint Board on Universal Service, *Universal Service Monitoring Report*, Table 3.2 (2008) (based on estimated figures regarding high-cost loop support and local switching support).

⁵⁷ In the first quarter of 2008, wireless carriers accounted for 40.7 percent of the total amount of contributions to the USF. *See* FCC, *Trends in Telephone Service*, Table 19.18 (Aug. 2008) (preliminary figure).

cost of constructing and operating the network facilities and functions used to provide the supported services”⁵⁸

The Commission has found that the use of forward-looking cost methodologies promotes competition by providing accurate investment signals to potential entrants, that such methodologies could bring greater economic opportunities to rural areas by promoting competitive entry and the provision of new services, and that forward-looking cost models would “compel carriers to be more disciplined in planning their investment decisions.”⁵⁹ Because a forward-looking cost model gives carriers the incentive to operate efficiently, and eliminates any incentive for carriers to inflate their costs or to avoid efficient cost-cutting,⁶⁰ universal service funding targeted for broadband deployment should be disbursed through the use of forward-looking cost models.

Second, high-cost support mechanisms should be governed by definitions of “reasonably comparable” rates and services, and of “sufficient” universal service support,⁶¹ that have been developed by the Commission with a view toward accommodating and advancing the deployment of broadband services in rural and high-cost areas.⁶²

The Act requires that consumers in rural and high-cost areas should receive services that are comparable to those available in urban areas, and that the rates for these services should also

⁵⁸ *USF First Report and Order*, 12 FCC Rcd at 8899 (para. 224), *quoted in* Comments of RCA, High-Cost Universal Service Support, Federal-State Joint Board on Universal Service, WC Docket No. 05-337, CC Docket No. 96-45, (filed May 8, 2009) (“RCA *Qwest II* NOI Comments”), at 30, n.93.

⁵⁹ *Id.* at 8936 (para. 293).

⁶⁰ *Id.* at 8900 (para. 226).

⁶¹ The Commission is currently developing definitions of these terms, which appear in Section 254 of the Act, in response to a U.S. court of appeals remand. *See Federal-State Joint Board on Universal Service, High-Cost Universal Service Support*, CC Docket No. 96-45, WC Docket No. 05-337, Notice of Inquiry, 24 FCC Rcd 4281 (2009); *Qwest Communications Int’l, Inc. v. FCC*, 398 F.3d 1222 (10th Cir. 2005).

⁶² *See* RCA *Qwest II* NOI Comments at 7, 41.

be comparable to rates charged for the same or similar services in urban areas.⁶³ In light of the fact that consumer demand for mobile broadband services has been rising exponentially,⁶⁴ the Commission’s national broadband plan should espouse the goal that universal service support mechanisms must be designed to achieve reasonable comparability between rural and urban broadband services (including mobile wireless broadband services) and rates.⁶⁵

The Act also specifies that universal service support mechanisms should be sufficient to preserve and advance universal service.⁶⁶ As RCA will discuss in a following section,⁶⁷ the national broadband plan should focus on ways to revise current universal service funding mechanisms to make sure that sufficient funding is available (coupled with funding from other sources, such as the broadband funding provided by the Recovery Act) to achieve ubiquitous deployment of broadband (including mobile wireless broadband) in rural and high-cost areas. “Sufficient” mechanisms—for purposes of Section 254(b)(5) of the Act—should be defined to encompass mechanisms that will generate funding for this broadband deployment.

B. Treating Broadband as a Supported Service.

The Commission seeks comment on the question of whether it should make broadband a supported service eligible to receive support directly from the high-cost support mechanisms.⁶⁸

⁶³ 47 U.S.C. § 254(b)(3).

⁶⁴ CTIA, for example, has indicated that, “[a]s of December 2007, mobile wireless providers served more than 15 million customers with advanced service lines—nearly 20 percent of all advanced services.” CTIA Rural Broadband Comments at 3 (footnote omitted), *quoted in* RCA *Qwest II* NOI Comments at 10, n.31. CTIA explained that advanced service lines provide over 200 kbps for both downlinks and uplinks. *Id.*

⁶⁵ *See id.* at 8 (stating that “[m]obile services, and more specifically, mobile broadband services, are broadly available and highly valued by all consumers. Thus, rural consumers have a right to expect the universal service system to ensure their access to wireless services that are ‘comparable’ to those provided in urban areas.”).

⁶⁶ 47 U.S.C. § 254(b)(5).

⁶⁷ *See* Section VI., *infra*.

⁶⁸ *Notice*, 24 FCC Rcd at 4354 (para. 41); *see id.* at 4376 (para. 106).

The agency notes that, “[a]lthough the High-Cost program [currently] does not explicitly support the provision of broadband, . . . 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.”⁶⁹

The Commission’s national broadband plan should advocate the inclusion of broadband (including mobile wireless broadband) as a supported service, for purposes of Section 254 of the Act, thus making broadband eligible for high-cost support and other support pursuant to Section 254 of the Act and the Commission’s rules.⁷⁰ If the Commission concludes that legislation is necessary to achieve this result, then the national broadband plan should recommend that Congress amend Section 254 to explicitly provide that broadband shall be treated as a service that is supported by federal universal service support mechanisms.

By making broadband a supported service, the Commission will end any doubt or controversy regarding whether the principles of Section 254(b) apply with respect to the provision and support of broadband services in rural and high-cost areas. For example, the principles of reasonable comparability, sufficient universal service mechanisms, and competitive and technological neutrality would apply to the funding of broadband services pursuant to Section 254. Explicitly treating broadband service as a supported service is an important antecedent for the Commission’s efforts to utilize universal service support mechanisms as a tool in working toward the objective of ubiquitous broadband deployment in rural and high-cost areas.

⁶⁹ *Id.* at 4354 (para. 39).

⁷⁰ See, e.g., *High-Cost Universal Service Support; Federal-State Joint Board on Universal Service*, WC Docket No. 05-337, CC Docket No. 96-45, Recommended Decision, 22 FCC Rcd 20477, 20491 (para. 56) (JB 2007) (recommending that the Commission add broadband Internet service to the list of services eligible for support under Section 254 of the Act).

C. Access to Broadband by Lower-Income Consumers.

The Commission “seek[s] comment on whether subsidizing the recurring subscription cost for broadband service . . . could address the affordability of broadband for all Americans.”⁷¹ RCA believes that subsidizing subscriptions to broadband services through the Lifeline and Link-Up programs⁷² would make these services more affordable, and would also serve other policy objectives as well.⁷³

Targeted low-income support programs have been a “highly effective and economically efficient means of increasing low-income [consumers’] subscribership.”⁷⁴ Direct broadband subscription discounts, through the Lifeline and Link-Up programs, would also enable low-income consumers to select the broadband services that best meet their needs. By making the discount program available to all ETCs, regardless of the technology used to provide service, the broadband Lifeline and Link-Up programs would also promote competitive entry in rural and high-cost areas.⁷⁵ In addition, the Commission has indicated that the availability of broadband

⁷¹ *Notice*, 24 FCC Rcd at 4361 (para. 54) (footnote omitted).

⁷² According to the Commission, Lifeline support provides low-income consumers with discounts of up to \$10.00, deducted from the monthly cost of telephone service for a single telephone line at their principal residence. This discount amount adjusts, in part, to take into account the amount of the service provider’s tariffed federal subscriber line charge. Link-Up support provides low-income consumers with discounts of up to \$30.00, deducted from the initial costs of installing telephone service. *See* 47 C.F.R. §§ 54.403, 54.411(a); *Universal Service Reform Further NPRM*, App. A, Chairman’s Draft Proposal, Order on Remand and Report and Order and Further Notice of Proposed Rulemaking (“*Chairman’s Draft Proposal*”), at para. 65, n.158.

⁷³ *See* RURAL BROADBAND STRATEGY REPORT at para. 24 (noting that “broadband deployment in those rural areas where poverty is historical and structural is particularly important. Properly implemented, connection via broadband to the wider world offers a boost to people caught in a cycle of poverty.”).

⁷⁴ Alliance for Public Technology, AT&T, CTIA, Cricket Communications, Inc., GCI, Qualcomm, RCA, Rural Telecommunications Group, Inc., Stelera Wireless, T-Mobile USA, Inc., TracFone Wireless, Inc., U.S. Cellular, Ex Parte Filing in CC Docket No. 96-45, WC Docket Nos. 05-337, 04-36, and 03-109, and WT Docket Nos. 07-195 and 04-356 (filed Apr. 23, 2009) (footnote omitted), at 1 (citing Gregory Rosston & Bradley Wimmer, *The “State” of Universal Service*, 12 INFORMATION ECONOMICS AND POLICY 261, 264-65 (2000)).

⁷⁵ *Id.* at 1-2.

services for low-income consumers continues to lag behind availability for consumers with higher incomes,⁷⁶ and the Commission has tentatively concluded that providing annual support through the Lifeline and Link-Up programs for broadband services should increase broadband subscribership.⁷⁷

D. Priority for Unserved and Underserved Areas.

The Commission seeks comment regarding the policies and mechanisms it should use “to prioritize [broadband] funding in an efficient manner[,]” and regarding whether funding priority should be given to unserved areas.⁷⁸

As RCA has suggested,⁷⁹ bringing broadband to unserved and underserved areas throughout the Nation should be a central focus of the Commission’s national broadband plan. The current status of rural broadband deployment illustrates the need for a continuing commitment by the Commission to expand broadband availability.⁸⁰ Acting Chairman Copps has indicated that, “[a]lthough inexact, currently available data and studies suggest that, in comparison to non-rural areas, broadband services are less extensively adopted in rural areas generally, and that this stems in part from less extensive deployment of broadband capability in rural areas.”⁸¹

⁷⁶ *Chairman’s Draft Proposal* at para. 74 (footnote omitted) (indicating that “only 25 percent of households with annual incomes below \$20,000 have broadband service”).

⁷⁷ *Id.* at para. 75.

⁷⁸ *Notice*, 24 FCC Rcd at 4354 (para. 41).

⁷⁹ See Section II., *supra*.

⁸⁰ See RURAL BROADBAND STRATEGY REPORT at para. 15 (noting that “[r]ural communities have long been unserved or underserved by broadband technology, but the full implication of this divide has only emerged as the Internet has become less and less a novelty, and more and more a necessity.”).

⁸¹ *Id.* at para. 27.

A recent estimate indicates that as many as one-third of all rural households do not have any options for obtaining broadband connections.⁸² Acting Chairman Copps has also noted that, “although mobile broadband networks cover 95.6 percent of the total U.S. population, they cover only 82.8 percent of the U.S. rural population compared with 99.0 percent of the non-rural population.”⁸³

There are several reasons why it is important for the Commission to give priority in its national broadband plan to improving the level of broadband deployment in unserved and underserved areas.⁸⁴ A principal reason is that everyone will benefit. This is true in at least two respects. Expanding broadband deployment in unserved and underserved areas throughout rural America will enhance economic development by making it more feasible for businesses to locate in areas that currently cannot attract businesses because of the inadequacies of the existing telecommunications infrastructure. Broadband deployment has the capability to stimulate business growth, bringing jobs to rural areas and increasing revenues for rural communities.⁸⁵ This eco-

⁸² Jon M. Peha, *Bringing Broadband to Unserved Communities*, THE BROOKINGS INSTITUTION (July 2008) (“Peha”), at 5, accessed at http://www.brookings.edu/papers/2008/07_broadband_peha.aspx, cited in RCA Broadband Comments at 7. See Public Technology Institute, *A White Paper: Economics of Broadband Access for Underserved Consumers and Businesses* (May 2007), at 2 (noting that “[a]ccording to the U.S. Census Bureau, 61.7% of the population is considered ‘rural.’ This equates to approximately 10-15 million homes and over 3.4 million small businesses. The Government Accountability Office (GAO) reports that only 17% of rural households subscribe to broadband services.”), accessed at <http://business.hughesnet.com/resources/white-papers/economics-of-broadband-access-for-underserved-consumers-and-businesses>.

⁸³ RURAL BROADBAND STRATEGY REPORT at para. 27 (footnote omitted).

⁸⁴ See generally *id.* at paras. 14-25.

⁸⁵ See *id.* at para. 17 (noting that “the benefits of broadband extend particularly to small businesses in rural areas”); *id.* at para. 18 (stating that “[i]t is clear that access to fixed and mobile broadband services also has the potential to enhance the efficiency and productivity of a number of agricultural activities in rural areas”).

conomic growth in rural areas will benefit the Nation as a whole, providing a much-needed boost to the national economy.⁸⁶

In addition, increasing broadband deployment in unserved and underserved areas will provide benefits extending beyond those areas because “[b]roadband exhibits positive network externalities where the benefits from broadband adoption accrue not just to individual consumers, but to other broadband users and society as a whole.”⁸⁷ Achieving ubiquitous broadband deployment in unserved and underserved areas will not only narrow the digital divide between urban and rural America, but will also strengthen and expand commercial, educational, and social ties among all people gaining access to broadband communications networks.

Funding to support the expansion of mobile wireless broadband networks in unserved and underserved areas is particularly important. One reason for this is that mobile broadband is uniquely situated to meet public safety needs in sparsely populated areas. As CTIA has noted, “[a]dditional [broadband] wireless facilities would . . . advance the public safety goals of E911 and public safety communications by enhancing coverage and capacity.”⁸⁸ More extensive deployment of mobile wireless broadband in rural areas will also enhance the availability of health-care and educational services that rely upon wireless communications networks.⁸⁹

⁸⁶ See *id.* at para. 16; *id.* at para. 25 (stating that “America’s economy depends on ensuring that all Americans, including those in rural areas, have access to broadband and are able to compete in this connected, global economy”).

⁸⁷ Robert D. Atkinson, *The Case for a National Broadband Policy*, INFORMATION TECHNOLOGY AND INFORMATION FOUNDATION (June 2007), at 4, accessed at <http://www.itif.org/index.php?id=52>, *quoted in* RCA Broadband Comments at 10.

⁸⁸ CTIA Rural Broadband Comments at 11; see RURAL BROADBAND STRATEGY REPORT at para. 21.

⁸⁹ See, e.g., Comments of CTIA, High-Cost Universal Service Support, Federal-State Joint Board on Universal Service, WC Docket No. 05-337, CC Docket No. 96-45, (filed May 8, 2009), at 4-5; *cf.* RURAL BROADBAND STRATEGY REPORT at paras. 19-20 (discussing educational and healthcare benefits provided by broadband services generally).

E. Provision of Support to Multiple Providers.

The Commission asks commenters to address the issue of “whether multiple providers of broadband services are useful or necessary for achieving our goal of providing broadband services to unserved and underserved areas.”⁹⁰

Examining this issue from the perspective of the relationship between the Commission’s broadband policies and the universal service goals and requirements adopted in the 1996 Act, it is important to note that, as a general matter, both Congress and the Commission have embraced competition as a means of furthering universal service objectives.⁹¹

Congress intended that universal service should support the competitive delivery of services in rural and high-cost areas, based on its view that the marketplace is an effective arbiter of which carriers can best provide services efficiently in response to customer demand.⁹² The Commission, in adopting the core principle of competitive neutrality, concluded that the principle would guard against the creation or perpetuation of unfair competitive advantages that could

⁹⁰ *Notice*, 24 FCC Rcd at 4359 (para. 49).

⁹¹ See *USF Twelfth Report and Order*, 15 FCC Rcd at 12264-65 (para. 114) (footnote omitted) (finding that “competitively neutral access to [universal service] support is critical to ensuring that all Americans, including those that live in high-cost areas, have access to affordable telecommunications services” and expressing concern regarding any procedures that “will thwart the intent of Congress, in section 254, to promote competition and universal service to high-cost areas”); *USF First Report and Order*, 12 FCC Rcd at 8802-03 (para. 50) (footnote omitted):

Commenters who express concern about the principle of competitive neutrality contend that Congress recognized that, in certain rural areas, competition may not always serve the public interest and that promoting competition in these areas must be considered, if at all, secondary to the advancement of universal service. We believe these commenters present a false choice between competition and universal service. A principal purpose of section 254 is to create mechanisms that will sustain universal service as competition emerges.

⁹² See *Alenco*, 201 F.3d at 616 (emphasis added):

[T]he [USF funding] program must treat all market participants equally—for example, subsidies must be portable—so that the market, and not local or federal government regulators, determines who shall compete for and deliver services to customers. . . . [T]his principle is made necessary not only by the economic realities of competitive markets *but also by statute*.

restrict market entry and deprive consumers of service choices.⁹³ A central objective behind the Commission's principle is to "enable the emergence of competition in high-cost areas served by Rural Carriers"⁹⁴

It therefore is evident that the Commission's national broadband plan should focus on the goal of designing and implementing support mechanisms that rely upon the competitive delivery of services in unserved and underserved areas, since this reliance on competitive markets will best serve the interests of consumers. Against this backdrop of the pro-competitive policies that undergird the Commission's universal service programs, RCA believes that the national broadband plan should endorse the provision of support to multiple competitive broadband providers in unserved and underserved areas.

A policy that supports multiple competitive providers will advance the Commission's broadband deployment goals because such a policy will encourage and support market entry by carriers that are best equipped to achieve the efficient and rapid deployment of broadband infrastructure. In the absence of support mechanisms that enable market entry by efficient carriers, rural and high-cost areas could continue to be unserved, or could continue to be served only by incumbent carriers that lack the incentive or capability to enhance and expand broadband infrastructure that enables the provision of broadband services with features and prices reasonably comparable to those available in urban areas.

Some have expressed the view that the funding of multiple networks in rural and high-cost areas should be avoided because such funding unduly strains universal service support

⁹³ *USF First Report and Order*, 12 FCC Rcd at 8802 (para. 48).

⁹⁴ Rural Task Force, White Paper 5, *Competition and Rural Service* (Sept. 2000), at 11, accessed at http://www.wutc.wa.gov/rtf/old/RTFPub_Backup20051020.nsf/?OpenDatabase.

mechanisms.⁹⁵ Such a problem can be circumvented, however, by designing broadband support mechanisms that make support fully portable among competing broadband service providers. Under this approach, the receipt of broadband support is customer-driven. That is, if a customer in a rural or high-cost area, in which competing carriers receive broadband support, switches from one carrier to another, then the broadband support follows the customer.

Once a carrier loses a customer, it loses the broadband support associated with that customer, with the support shifting to the new carrier selected by the customer. As Cellular South, Inc., has explained, “[i]t makes no difference whether there are two or 200 competitive ETCs in a high-cost area because the available support will always depend on each competitive ETC’s line counts and those line counts will always be capped according to the number of customers in the area.”⁹⁶

VI. A NEW FRAMEWORK FOR BROADBAND SUPPORT.

One of the most important questions posed by the Commission in the *Notice* is whether the Commission “[s]hould . . . create new programs specifically to provide broadband support[.]”⁹⁷ The Commission also asks whether “such programs [should] be designed around the delivery of broadband[.] If we create new programs, should these programs replace the existing programs or supplement them?”⁹⁸

In earlier sections, RCA has argued that the Commission should modify existing universal service mechanisms, to better achieve the agency’s goals for the deployment of broadband

⁹⁵ See *Federal-State Joint Board on Universal Service*, WC Docket No. 05-337, CC Docket No. 96-45, Notice of Proposed Rulemaking, 23 FCC Rcd 1467, 1488 (2008) (Statement of Chairman Kevin J. Martin).

⁹⁶ Comments of Cellular South, Inc., High-Cost Universal Service Support, Federal-State Joint Board on Universal Service, WC Docket No. 05-337, CC Docket No. 96-45, (filed Apr. 17, 2008), at 6.

⁹⁷ *Notice*, 24 FCC Rcd at 4354 (para. 41).

⁹⁸ *Id.*

services in unserved and underserved areas, by merging the existing rural and non-rural support mechanisms, by using forward-looking cost methodologies, by defining key terms in Section 254 of the Act in a manner that helps to facilitate broadband deployment,⁹⁹ by treating broadband as a supported service,¹⁰⁰ and by using the Lifeline and Link-Up programs to subsidize broadband subscriptions.¹⁰¹ In this section RCA suggests that the Commission should also consider more sweeping approaches for utilizing universal service mechanisms to support broadband deployment.¹⁰²

The Commission in this proceeding has emphasized the pivotal importance of broadband networks, observing that “[h]igh-speed ubiquitous broadband can help to restore America’s economic well-being and open the doors of opportunity for more Americans, no matter who they are, where they live, or the particular circumstances of their lives. It is technology that intersects with just about every great challenge facing our nation.”¹⁰³

Given this surpassing importance of the Nation’s broadband infrastructure, and given the fact that, “[a]s many of their fellow citizens in more densely populated parts of the country go online for work, education, entertainment, healthcare, civic participation, and much more, too many rural Americans are being left behind[,]”¹⁰⁴ the Commission should evaluate in its national broadband plan whether the time has now come to forge a new direction for the agency’s universal service program.

⁹⁹ See Section V.A., *supra*.

¹⁰⁰ See Section V.B., *supra*.

¹⁰¹ See Section V.C., *supra*.

¹⁰² See RCA *Qwest II* NOI Comments at 39 (stating that “[i]n order for Commission policies to continue to advance universal service, the next horizon for the Commission to pursue is the utilization of high-cost support to promote the deployment of broadband service in rural and high-cost areas”).

¹⁰³ Notice, 24 FCC Rcd at 4343 (para. 1).

¹⁰⁴ RURAL BROADBAND STRATEGY REPORT at para. 2.

RCA believes that a simple proposition should be at the core of the Commission's review of the existing universal service mechanisms: The Commission should stop funneling high-cost support to networks that are used to provide voice-grade plain old telephone service, and should start shifting high-cost funding to support the deployment of broadband networks, including mobile wireless broadband networks.

As RCA has explained,¹⁰⁵ the Commission no longer has the luxury of continuing to use universal service dollars to support aging and outmoded technologies that deliver voice service, but are limited to the provision of dial-up access to the Internet.¹⁰⁶ Instead, this funding should be shifted to support technologies that can be rapidly deployed and that can efficiently provide broadband services in unserved and underserved areas.¹⁰⁷ Consideration of this redistribution of universal service support should be a significant part of the Commission's national broadband plan.

VII. CONCLUSION.

The Commission's development of a national broadband plan provides the agency with an important opportunity to prepare a blueprint for developing, deploying, and utilizing broadband networks in a way that will bring enormous benefits to all Americans. RCA is confident

¹⁰⁵ See Section IV.C., *supra*.

¹⁰⁶ Consumers in many rural communities still rely upon dial-up access. Because of this, the ability of these consumers to use the Internet will continue to deteriorate. Professor Peha has explained that "applications that once worked well over dial-up are now becoming problematic for dial-up users. . . . If broadband is available to 90 percent of Internet users, then much of the Internet will no longer be designed for or particularly useful to dial-up users, and those users [will] see the Internet as less and less valuable." Peha at 15.

¹⁰⁷ RCA recognizes that incumbent providers of voice-grade services have become dependent in part upon high-cost funding to operate and maintain their networks. *See Narrow Universal Service Reform Proposal* at para. 3. Given these circumstances, the Commission would need to devise an equitable and workable transition to a high-cost mechanism principally devoted to support broadband services. At the same time, the Commission should not lose sight of the fact that "[t]he Act does *not* guarantee all local telephone service providers a sufficient return on investment; quite to the contrary, it is intended to introduce competition into the market. Competition necessarily brings the risk that some telephone service providers will be unable to compete." *Alenco*, 201 F.3d at 620 (emphasis in original).

that the Commission will seize this opportunity, and will bring to bear the full measure of its technical and policymaking expertise to ensure that these benefits will be realized.

Acting Chairman Copps has observed that “[w]e must marry the dynamic innovations and flexibility of the private sector with the policy vision of the public sector to create a model of how government and industry can partner to ensure ubiquitous broadband access.”¹⁰⁸ RCA and its members look forward to joining this partnership, and RCA encourages the Commission, as it undertakes the task of developing its national broadband plan, to give priority to the means for deploying broadband in unserved and underserved areas, and to revising its universal service support mechanisms so that they more effectively promote the deployment of advanced broadband technologies, including mobile wireless broadband technologies, throughout rural America.

Respectfully submitted,

RURAL CELLULAR ASSOCIATION



David A. LaFuria
Todd B. Lantor
John Cimko

LUKAS, NACE, GUTIERREZ & SACHS, LLP
1650 Tysons Boulevard, Suite 1500
McLean, Virginia 22102
(703) 584-8678

June 8, 2009

¹⁰⁸ RURAL BROADBAND STRATEGY REPORT at para. 7.