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Melissa E. Newman
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August 9, 2007

EX PARTE

***VIA ECFS and
ELECTRONIC MAIL***

Commissioner Deborah Taylor Tate
Federal Communications Commission
445 12th Street, S.W.
Washington, DC 20554

Re: *In the Matter of Federal-State Joint Board on Universal Service,*
CC Docket No. 96-45

Dear Commissioner Tate:

Pursuant to Sections 1.49(f) and 1.1206 of the Federal Communications Commission's ("Commission") rules, Qwest Communications International Inc. ("Qwest") is submitting this *ex parte* so that it can be included in the record of the above-captioned proceeding.

On June 29, 2007, Gary Lytle, Lynn Starr and I, all of Qwest, met with you and your legal advisor, Chris Moore, regarding Qwest's proposal for using federal universal service funding to expand the nation's access to broadband service.¹ On July 9, 2007, Qwest submitted a white paper ("Qwest Proposal") that provided further detail on Qwest's proposal and is provided again with this letter. As you may recall, Qwest's proposal would limit federal universal service support for wireless carriers to one connection per household and redirect the resulting savings in universal service funding to subsidize broadband deployment in unserved areas of the country through a competitive bidding process conducted annually by the states according to federal criteria. The states would receive "block grants" from the Commission based on the percentage of unserved households in each state. The states would then distribute this funding as one-time, upfront grants for deployment of broadband facilities in unserved areas through a competitive bidding process to the lowest qualified bidder. Winning bidders would commit to provide broadband services to the bid area for ten years at rates reasonably comparable to those charged to customers in urban areas.

This letter responds to several questions that arose in the meeting regarding Qwest's proposal.

¹ See *ex parte* Letter to Ms. Marlene H. Dortch, Secretary, Federal Communications Commission from Ms. Melissa E. Newman, Qwest, CC Docket No. 96-45, filed June 29, 2007.

Data Collection Methods to Determine Where Broadband is Currently Unavailable

The Commission will need to provide some guidance and oversee a system whereby state agencies, aided perhaps by industry or individual citizens, can develop comprehensive assessments of where the defined level of broadband service is unavailable. In order to determine where high-speed Internet access is not currently deployed, each state should be permitted to map high-speed Internet access deployment based on Zip codes, at least for the first round of grants to expand service. Thereafter, states could choose to use more refined measures to target areas within Zip codes that remain unserved. Such measures might include geographic information system (“GIS”) mapping technology to identify where broadband is already available based on deployment data furnished by broadband service providers as has been done in the ConnectKentucky program.

Estimate of Universal Service Funds Made Available by a Single-Line Limitation on Wireless Competitive Eligible Telecommunications Carriers

As we discussed in our white paper, the Federal Universal Service Fund (“FUSF”) should not be increased to support the deployment of high-speed Internet access. Instead, a portion of existing funds should be re-directed to promote deployment of broadband. Qwest has estimated that a cap on wireless connections that would limit competitive eligible telecommunications carriers (“CETCs”) to support for a single line per household (or business) on a per carrier basis would enable approximately \$500 million of current FUSF support to be re-directed to fund broadband deployment in unserved areas. This estimate derives from the reported statistic that nearly 50% of all wireless subscriptions are family plans,² combined with the Federal-State Joint Board on Universal Service’s projected CETC funding amount for 2007 of \$1.28 billion.

Legal Authority of the Federal Communications Commission to Implement the Qwest Proposal

The Commission can use its ancillary authority to accomplish Qwest’s “third generation” policy for the FUSF within the existing legal framework of the Communications Act. This authority will permit the Commission to provide funds for broadband services to unserved areas through a block grant program managed by the states. In so doing, the Commission would build upon recent decisions where it has (1) utilized its ancillary authority to assert general jurisdiction over broadband service providers, and (2) required interconnected Voice over Internet Protocol (“VoIP”) providers to contribute to the FUSF. Moreover, the Commission can rely upon the United States Court of Appeals for the D.C. Circuit’s opinion in *Rural Telephone Coalition v.*

² See David Wilson, *All in the Family*, Ericsson Business Review (Jan. 2007) (stating that family plans accounted for less than 10 percent of the U.S. wireless market in 2003, but now account for 41 percent of adult wireless plans, and are projected to account for 52 percent of the wireless market in 2008).

FCC,³ which approved the Commission's creation of the universal service program (out of whole cloth) pursuant to its ancillary authority. In sum, the use of the Commission's ancillary authority represents a flexible approach that will provide the Commission with an opportunity to implement the various aspects of Qwest's proposal.

The Commission should adopt a broadband support mechanism under the general statutory powers delegated to it by Congress under Section 1 of the Act,⁴ as well as its ancillary jurisdiction under Sections 4(i) and 303(r).⁵ The Commission was created under Section 1 of the Communications Act "to make available, so far as possible, to all the people of the United States . . . a rapid, efficient, Nation-wide, . . . wire and radio communication service with adequate facilities at reasonable charges . . ."⁶ Under Section 4(i), the Commission is further authorized to "make such rules and regulations . . . as may be necessary in the execution of its functions."⁷ Relying on this authority, the D.C. Circuit upheld the Commission's creation of the FUSF in 1988.⁸

More recently, the Commission has justified the regulation of broadband services pursuant to its ancillary authority. For instance, the Commission used such authority to require providers of "interconnected" VoIP services to contribute to the FUSF.⁹ In that matter, the Commission deferred a decision on whether to classify VoIP as a telecommunications service or information service, basing its *Order* instead on its ancillary jurisdiction under Section 1 and, alternatively, its "permissive contribution" authority under Section 254(d).¹⁰ The Commission's ancillary

³ *Rural Telephone Coalition v. FCC*, 838 F.2d 1307 (D.C. Cir. 1988).

⁴ 47 U.S.C. § 151.

⁵ 47 U.S.C. §§ 154(i) & 303(r). Section 303(r) states that "[t]he Commission may perform any and all acts, make such rules and regulations, and issue such orders, not inconsistent with this [Act], as may be necessary in the execution of its functions."

⁶ 47 U.S.C. § 151.

⁷ 47 U.S.C. § 154(i).

⁸ *Rural Telephone*, 838 F.2d at 1315; *see also Am. Library Ass'n v. FCC*, 406 F.3d 689, 692-93 (D.C. Cir. 2005) (holding that the Commission may regulate under its ancillary jurisdiction when "the subject of the regulation [is both] . . . covered by the Commission's general grant of jurisdiction under Title I of the Communications Act . . . [and] 'reasonably ancillary to the effective performance of the Commission's various responsibilities.'" (citation omitted)).

⁹ *In the Matter of Universal Service Contribution Methodology*, Report and Order and Notice of Proposed Rulemaking, 21 FCC Rcd 7518 (2006) (hereinafter "*VoIP Contribution Order*"), *aff'd in part and denied in part*, *Vonage Holdings Corp. v. FCC*, 2007 U.S. App. Lexis 12634 (D.C. Cir., June 1, 2007).

¹⁰ *VoIP Contribution Order* at 7521 ¶ 5, 7541-42 ¶ 46. Under the Commission's permissive contribution authority, any provider of "interstate telecommunications" may be required to contribute to the preservation and advancement of universal service. 47 U.S.C. § 254(d). In *Vonage Holdings* the D.C. Circuit affirmed the *VoIP Contribution Order*. In so doing, the D.C. Circuit did not reach the ancillary jurisdiction issue, instead basing its decision on its interpretation of the Commission's permissive contribution authority. *Vonage Holdings* at *17.

authority “may be employed, in the Commission’s discretion, when [(1)] Title I of the Act gives the Commission subject matter jurisdiction over the service to be regulated and [(2)] the assertion of jurisdiction is ‘reasonably ancillary to the effective performance of [its] various responsibilities.’”¹¹ As for the context of providing subsidies for broadband in unserved areas, both of these predicates are met.

First, the Commission has subject matter jurisdiction over broadband services. As the Commission has reiterated in its Notice of Inquiry on Broadband Industry Practices,¹² “broadband services are ‘wire communications’ or ‘radio communications,’ as defined in sections 3(52) and 3(33) of the Act,¹³ and section 2(a) of the Communications Act gives the Commission subject matter jurisdiction over ‘all interstate and foreign communications by wire or radio.’”¹⁴

Second, broadband support for unserved areas is “reasonably ancillary” to the effective performance of the Commission’s various responsibilities. Section 254(d) requires the Commission to establish “specific, predictable, and sufficient mechanisms . . . to preserve and advance universal service.”¹⁵ Under the enumerated principles of Section 254(b), the Commission is twice directed to base its universal service policies on providing access to “advanced telecommunications and information services.”¹⁶ As stated above, Section 1 of the Act requires the Commission “to make available, so far as possible, to all the people of the United States . . . a rapid, efficient, Nation-wide, . . . wire and radio communication service with adequate facilities at reasonable charges . . .”¹⁷ Similarly, Section 706(a) of the Act requires the Commission (*and* each state commission) to “encourage” the deployment of advanced telecommunications capability to all Americans.¹⁸ Section 157(a) of the Act declares it to be the “the policy of the United States to encourage the provision of new technologies and services to

¹¹ *VoIP Contribution Order*, 21 FCC Rcd at 7541-42 ¶ 46, citing *United States v. Southwestern Cable Co.*, 392 U.S. 157, 177-78 (1968).

¹² *In the Matter of Broadband Industry Practices*, Notice of Inquiry, 22 FCC Rcd 7894 (2007) (hereinafter “*Broadband NOI*”).

¹³ 47 U.S.C. §§ 153(33), (52).

¹⁴ *Broadband NOI*, 22 FCC Rcd at 7896 ¶ 6 (citing 47 U.S.C. § 152(a)).

¹⁵ 47 U.S.C. § 254(d).

¹⁶ 47 U.S.C. § 254(b)(2) & (b)(3).

¹⁷ 47 U.S.C. § 151.

¹⁸ 47 U.S.C. § 157 nt (Advanced Telecommunications Incentives).

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the public.”¹⁹ Thus, the “requisite nexus” between the universal service provisions of Section 254 and the Commission’s ancillary authority exists.²⁰

With regard to the general concept of using a block grant program administered by the states for distributing broadband support, the Qwest proposal falls well within the authority delegated to the states under Section 214(e)(3). Moreover, since the Commission’s decision in 1998, the Tenth Circuit has recognized that the Act “plainly contemplates a partnership between the federal and state governments to support universal service,”²¹ and Section 706 of the Act requires the Commission *and* each state commission to encourage the deployment of advanced services.

USAC’s Role in the Qwest Proposal

As just discussed above, pursuant to its ancillary jurisdiction, the Commission can establish a program that provides funding to enable universal high-speed Internet service in the form of a block grant program managed by the states. The Commission is not required to use the Universal Service Administrative Company (“USAC”) to administer the distribution of federal Universal Service support for Qwest’s proposed program since Section 254 does not require a particular form of administration of the federal universal service programs.²² USAC could, and likely would, however, play a role in the disbursement of the relevant federal funds on an annual basis to the states on the basis of unserved households.

Should you have any questions regarding this submission, please contact me using the information reflected in the letterhead.

Sincerely,

/s/ Melissa E. Newman

¹⁹ 47 U.S.C. § 157(a).

²⁰ See *VoIP Contribution Order*, 21 FCC Rcd at 7542 ¶ 47. The fact that Section 254 establishes a universal service program does not preclude the Commission from using its ancillary authority to provide universal service support for broadband services. As the Commission itself recognized in the *VoIP Contribution Order*, “[w]e do not believe that the grant of permissive authority in section 254(d) precludes us from exercising our ancillary jurisdiction in the universal service context . . . Nothing in the legislative history, text, or structure of the 1996 Act suggests that Congress intended to strip the Commission of its ancillary authority over universal service obligations by adopting section 254.” *Id.* at 7543-44 n.171. In a similar vein, nothing in Section 254 precludes the Commission from adopting a separate program for broadband support in unserved areas.

²¹ *Qwest Corp. v. FCC*, 258 F.3d 1191, 1203 (10th Cir. 2001) (hereinafter “*Qwest I*”). While the D.C. Circuit has also addressed delegation issues, *United States Telecom Ass’n v. FCC*, 359 F.3d 554 (D.C. Cir. 2004), Qwest believes that the *Qwest I* decision is controlling in this instance, because the Tenth Circuit dealt specifically with delegation in the context of universal service.

²² See *Federal-State Joint Board on Universal Service*, Notice of Inquiry, First Report and Order, 12 FCC Rcd 8776 (1997).

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Attachment

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Qwest's Proposal For Broadband Deployment To Unserved Areas

Executive Summary

Our current system of federal universal service support lacks any strategic focus in terms of providing direct support for the deployment of broadband to unserved households. Instead, it devotes increasing support to fund wireless services in areas already served by existing wireless providers. For both the first generation of universal service policy, which supported the deployment of telephone service in more remote areas, and the second generation of universal service policy, which primarily extended support to wireless services, policymakers have essentially allowed providers to define the requisite amount of support provided. For broadband services, it is critical for the Federal Communications Commission ("FCC") to adopt a "third generation" policy that focuses instead on consumers, providing efficient and effective levels of support only where necessary to ensure access to unserved areas. Indeed, FCC Chairman Martin has consistently recognized the significance of broadband deployment to our economy and society, and has recently suggested that he is looking for a strategy to spur broadband using a cost effective and sensible universal service strategy.¹ Emphasizing the imperative of modernizing our universal service system, Commissioner Adelstein similarly explained that "as voice

¹ See Sean Michael Kerner, *FCC Calls for More and Less Competition*, internetnews.com (June 19, 2007) (quoting Chairman Martin as stating that "we can't have universal service subsidies to multiple providers in rural areas" that universal service "shouldn't be subsidizing multiple voice competitors," and that "instead we should subsidize broadband in rural areas.").

becomes just one application over broadband networks, we must ensure that universal service evolves to promote advanced services.”²

Mindful of the need to reorient the priorities of our universal service policy and accomplish it in a different way, Qwest proposes a new model of providing universal service support to spur the deployment of broadband connections to unserved households.

In particular, Qwest proposes a new policy that:

- Limits federal universal service support for wireless carriers to one connection per household;
- Redirects the resulting savings in universal service funding to subsidize broadband deployment in unserved areas of the country;
- Delegates to the states the role of providing one-time payments (to be set by a competitive bidding process) to subsidize the construction of broadband facilities in these unserved areas;
- Establishes a limited pilot program for the buildout of wireless voice services in unserved areas; and
- Terminates once the goal of broadband access to unserved areas is achieved.

In making this proposal, Qwest recognizes the core role of universal service values in the nation’s communications law and policy. Furthermore, Qwest acknowledges the existing reliance interests and formidable challenges that are presented by both preserving and reforming universal service. In light of the FCC’s ongoing efforts to bring comprehensive reform to high-cost support mechanisms (on which Qwest has commented

² Statement of FCC Commissioner Jonathan Adelstein on “Assessing the Communications Marketplace: A View from the FCC,” before the United States Senate Committee on Commerce, Science and Transportation at 5 (Feb. 1, 2007).

previously),³ Qwest believes that it is now essential to direct and channel universal service support to bring next generation networks to unserved areas.

I. Introduction

One of the most compelling claims for universal service support -- the need to facilitate the build-out of broadband infrastructure in remote areas -- is on the backburner. The lack of a broadband deployment strategy is a casualty of a state of affairs whereby the high-cost portion of the universal service fund ("USF") attempts to subsidize both universal access and competition between platforms. Accordingly, the USF subsidizes wireline connections in "high-cost" areas, as well as multiple wireless connections in those same areas. Moreover, wireless services are subsidized on a per-line basis at the same rate as wireline connections regardless of their actual cost or any proven need for the subsidy. In short, current policy ignores a critical need -- a national commitment to spur ubiquitous broadband deployment -- while directing substantial support to subsidize established technologies in areas where they are already widely available.

To set the stage for this paper's proposal for a universal service program to spur the deployment of broadband infrastructure in rural areas, Part II briefly summarizes the evolution of universal service policy and offers a critique of the current model. Part III outlines Qwest's proposal to subsidize the deployment of broadband and explains how the current system can be modified to free up funds to support ubiquitous broadband. Part IV offers a short conclusion.

³ See, e.g., *In the Matter of Federal-State Joint Board on Universal Service, High-Cost Universal Service Support*, Comments of Qwest Communications International Inc., CC Docket No. 96-45 (Mar. 27, 2006) ("Qwest USF Comments").

II. Background

The policy of “universal service” reflects a commitment that certain information infrastructure should not be limited to those who can afford to pay for it, or to those who live in areas where the economics justify deployment. The concept of universal service was introduced into telephony by Theodore Vail, who served as the first president of AT&T. In Vail’s view, a regulated monopoly could ensure “one system, one policy, universal service.” Based on his perspective as a former Post Office official, Vail instituted a program of implicit cross-subsidies akin to those built into the structure of the postal system.⁴

In the context of telephony, the value of a universal service program was not only that it could spur greater adoption of a socially useful technology, but also that the increased adoption would increase the value of the network itself. Notably, as economists later explained, network industries like telephony enjoy a *network externality* -- the more users who adopt it, the more valuable it is (because users can talk to more individuals).⁵ In the case of telephony, there are direct network externality benefits (a more valuable service) as well as indirect network externality benefits (more applications and uses are developed for the service as it is more widely adopted).

The existence of the Bell System set the basic framework for our nation’s universal service policy. For the last century, the principal strategy for ensuring “universal service”

⁴ PAUL STARR, *THE CREATION OF THE MEDIA: THE POLITICAL ORIGINS OF MASS COMMUNICATION* 207 (Basic Books, 2004).

⁵ Michael L. Katz & Carl Shapiro, *Network Externalities, Competition, and Compatibility*, 75 AM. ECON. REV. 424, 424 (1985) (explaining that “the utility that a user derives from consumption of the good increases with the number of other agents consuming the good.”).

was a reliance on a system of cross-subsidies that were built into AT&T's telephone rate structure. These cross-subsidies took the form of geographically averaged rates, above-cost long-distance rates, and above-cost business rates.⁶ The breakup of AT&T into separate Bell Operating Companies ("BOCs") called for a system of access charges (assessed by local telephone companies on long-distance carriers) to replace the long-distance rate subsidies and the settlements process that was part of the Bell System.⁷ Moreover, even after local independents built out service to underserved areas and thereby provided universal access to them, regulators approved higher access charges for the non-Bell affiliated operating companies. Finally, to provide additional support, regulators also developed a "high-cost fund" (among other mechanisms) to provide an explicit subsidy to the local telephone companies.

The "second generation" of universal service policy emerged from the Telecommunications Act of 1996 ("1996 Act"). In the 1996 Act, Congress sought to create a new regulatory framework that would both welcome competition and preserve (and expand) universal service in a new environment.⁸ This two-prong policy defied the conventional wisdom that competition and universal service were contradictory goals. Instead, the 1996 Act embraced both competition and universal service -- by supporting universal service goals through an explicit subsidy mechanism (*i.e.*, a surcharge imposed

⁶ See JONATHAN E. NUECHTERLEIN & PHILIP J. WEISER, DIGITAL CROSSROADS: AMERICAN TELECOMMUNICATIONS POLICY IN THE INTERNET AGE 334-335 (THE MIT PRESS, 2005). Notably, during the era of AT&T's local and long distance monopoly, a "settlements system" ensured that revenues generated by the telephone network were equitably distributed to AT&T divisions and rural carriers to ensure universal access. *Id.* at 48.

⁷ The settlements process provided subsidies to independent telephone companies from the Bell System based on embedded cost.

⁸ H.R. Rep. No. 204, 104th Cong., 2d Sess. 80 (1996) (recognizing need to reform universal service support "in the context of a local market changing from one characterized by monopoly to one of competition.").

on telecommunications providers) and the phasing out of implicit subsidies. Ambitiously, the Act called not merely for the provision of “[q]uality services” offered at “just, reasonable, and affordable rates,” but also for “[a]ccess to advanced telecommunications and information services [to] be provided in all regions of the Nation.”⁹

The 1996 Act not only provided explicit subsidies to established wireline carriers, but also sought to make available “portable” subsidies to new entrants who served customers previously served by the subsidized carrier. Under Section 254(e), the Act suggests such a policy by entitling any eligible telecommunications carrier (“ETC”) to compete for universal service support.¹⁰ That section, in turn, references Section 214(e), which assigns to state agencies the role of certifying ETCs based upon certain broad criteria.¹¹ As implemented, however, the ETC program rests on three questionable premises that have led to an ever-increasing demand for additional universal service subsidies.

The first premise is the manner in which the FCC has attempted to accommodate the concept of portable universal service subsidies and the promotion of competition. To avoid the harshness of a rule in which longstanding wireline incumbents lost subsidies, the

⁹ 47 U.S.C. § 254(b).

¹⁰ 47 U.S.C. § 254(e).

¹¹ In particular, Section 214(e)(2) provides:

A State commission shall upon its own motion or upon request designate a common carrier that meets the requirements of paragraph (1) as an eligible telecommunications carrier for a service area designated by the State commission. Upon request and consistent with the public interest, convenience, and necessity, the State commission may, in the case of an area served by a rural telephone company, and shall, in the case of all other areas, designate more than one common carrier as an eligible telecommunications carrier for a service area designated by the State commission, so long as each additional requesting carrier meets the requirements of paragraph (1). Before designating an additional eligible telecommunications carrier for an area served by a rural telephone company, the State commission shall find that the designation is in the public interest.

FCC provided that the high-cost fund would continue the same level of support for established rural wireline firms, *even when a firm lost a customer*. This system -- enabling competitive ETCs ("CETC") to receive subsidies for serving customers in supported areas, while holding incumbent providers harmless -- created a recipe for an ever-expanding federal fund. As the FCC foresaw in 2001:

[A]s an incumbent "loses" lines to a competitive eligible telecommunications carrier, the incumbent must recover its fixed costs from fewer lines, thus increasing its per-line costs. With higher per-line costs, the incumbent would receive greater per-line support, which would also be available to the competitive eligible telecommunications carrier for each of the lines that it serves. Thus, a substantial loss of an incumbent's lines to a competitive eligible telecommunications carrier could result in excessive fund growth.¹²

The recent Joint Board decision reported that the earlier FCC prediction came true, with competitive ETC support growing from \$15 million in 2001 to a projected \$1.28 billion in 2007 (assuming no action to curtail that amount).¹³

A second premise behind the increased level of competitive ETC support is the method of calculating the subsidy amount. In particular, a CETC -- almost inevitably a wireless carrier -- receives support based on the amount of the incumbent wireline company's costs.¹⁴ Consequently, the CETC qualifies for the same per-line subsidy regardless of its embedded or forward-looking cost.

¹² Report and Order, *Federal-State Joint Board on Universal Service, Multi-Association Group (MAG) Plan for Regulation of Interstate Services of Non-Price Cap Incumbent Local Exchange Carriers and Interexchange Carriers*, 16 FCC Rcd 11,244, 11,325-26 ¶ 207 (2001).

¹³ *In the Matter of High-Cost Universal Service Support, Federal-State Joint Board on Universal Service*, FCC 07J-1, Recommended Decision, WC Docket No. 05-337 at ¶ 4 (Rel. May 1, 2007) (hereinafter "Joint Board Recommendation").

¹⁴ See Written Statement of FCC Commissioner Deborah Taylor Tate on "Universal Service Fund: Assessing the Recommendations of the Federal-State Joint Board," before the United States Senate Committee on Commerce, Science and Transportation at 5 (June 12, 2007).

The third and final premise that has facilitated strong demand for increasing CETC subsidies is that state agencies are charged with certifying CETCs as eligible to receive support, but bear no responsibility for raising the necessary funds for such a subsidy program. Under this regime, states face little external incentive not to certify additional ETCs, meaning that numerous areas might well be served by several ETCs. In fact, even though some of these carriers have *already* successfully been serving “high-cost” areas without universal service support, they are eligible for support for all of their customers once the carrier is certified as an ETC (*i.e.*, regardless of whether the customers were signed up in advance of the carrier being certified).¹⁵ Moreover, without any primary line restriction placed on recipients of universal service support,¹⁶ entrants are encouraged to sign up multiple connections in households -- say, on a “family plan” -- and receive subsidies for all of the customers.¹⁷

Under the current system, as West Virginia Consumer Advocate and Joint Board member Billy Jack Gregg put it, “states have been faced with the perverse incentive of gaining more federal universal service support the more ETCs they approve,” particularly

¹⁵ See Testimony of Roger Nishi, Waitsfield and Champlain Valley Telecom, before the United States Senate Committee on Commerce, Science & Transportation (June 12, 2007).

¹⁶ Congress reversed an earlier initiative by the Federal-State Joint Board on Universal Service to limit the provision of universal service to a single connection. In 2004, the Joint Board recommended that such a “primary line” restriction would be the best option to ensure the sustainability of the USF. In Section 634 of the 2005 Consolidated Appropriations Act, Congress prohibited the FCC from implementing the Joint Board’s recommendations regarding the primary line restriction. Congress has reenacted this prohibition every year, with the most recent occurring in H.J.Res. 20, § 105 (which governs spending through September 30, 2007).

¹⁷ See Comments of Verizon and Verizon Wireless in WC Docket No. 05-337 at its attached Modernizing Universal Service: Verizon’s Plan for Comprehensive Reform at 12 (May 31, 2007) (“Consider, for example, a family that has one wireline connection, and then purchases five new wireless handsets on a family plan. Under the current rules, this decision increases the USF support for this family by a factor of six. Further, in this case there are two networks that have been built to serve this household and the fund is valuing one network five times more than the other.”) (“Verizon USF Comments”).

where the incumbent is a rural carrier “since these areas generally receive higher levels of federal support.”¹⁸ By way of example, AT&T receives “non-rural” USF support to serve Hattiesburg, Mississippi -- a city of approximately 45,000 residents (according to the 2000 Census). In the Hattiesburg wire center, there are now *eleven* CETCs receiving universal service support,¹⁹ which clearly suggests that wireless competition would be vibrant within the wire center in the absence of CETC support.²⁰ This state of affairs reflects the fact that support for wireless entrants is based on the availability of subsidies to the wireline incumbent provider and not the nature of the service territory itself (*i.e.*, in terms of population density).²¹ Consequently, universal service policy currently offers wireless providers windfall opportunities to receive subsidies for providing service in areas they would serve even without subsidies and fails to provide a directed incentive to ensure that providers build-out wireless service to unserved areas.

In short, under this “second generation” model of universal service, the incentive structure for carriers, states, and consumers militates for ever-increasing subsidies for ever-increasing entrants -- without any strategic focus as to funding priorities. As such, it is a

¹⁸ Notice of Proposed Rulemaking, *Federal-State Joint Board on Universal Service*, 19 FCC Rcd. 10800, 10868 ¶ 1 and n.370 (2004) (Separate Statement of Billy Jack Gregg).

¹⁹ Universal Service Administrative Company, High Cost Model Support Projected by Wire Center, 3rd Quarter 2007.

²⁰ See Reply Comments of the National Association of State Utility Consumer Advocates Supporting a Cap on the High-Cost Universal Service Fund, WC Docket No. 05-337 at 13 (June 21, 2007) (“It appears . . . that receipt of federal support has been a bonus for wireless carriers in areas where they are already providing service and investing in facilities.”).

²¹ It is not just non-rural support that ends up in anomalous places. The rural USF fund ends up supporting less-than-rural places too. Take, for example, the study area including Hinesville, Georgia (population 30,392, according to city-data.com), where CenturyTel-subsiidiary Coastal Utilities receives approximately \$4.4 million in annual high-cost support. On top of that, Triton PCS, Southern Communications Services, and Cingular Wireless are CETCs in Hinesville, meaning that a town of 30,000-plus people receives subsidies for one wireline and three wireless carriers. USAC, Interstate Common Line Support Projected Per Line, 3Q2007; USAC, High Cost Support Projected by State by Study Area, 3Q2007.

recipe for burgeoning demands for universal service funds, with many beneficiaries unrelated to the purpose of the subsidy: universal access to connectivity. Ironically, even with the increasing demands to fund wireless providers, the USF is not focused on ensuring access to wireless services in unserved areas and, instead, continues to fund multiple wireless providers and multiple wireless connections in already served areas.

III. A Third Generation Policy for Facilitating the Rollout of Broadband to Unserved Areas

Qwest here offers a “third generation” universal service policy that takes account of the critical lessons -- both positive and negative -- from the earlier generations of universal service policy. In so doing, Qwest advances a new initiative to support the deployment of broadband service to unserved areas of the United States. Significantly, this third generation universal service policy would operate in a targeted and cost-effective manner.

A. Ensuring Access to Ubiquitous Broadband

The fundamental goal of universal service policy should be to ensure that all citizens have access to critical communications technologies. In the case of both wireline and wireless networks, our universal service policy has gone awry of that objective. For broadband, however, we have yet to adopt a policy that serves this goal. To achieve universal access to broadband, we need to develop a strategy for subsidizing the development and deployment of broadband in areas where no such provider exists. As explained below, the most efficient model of spurring the entry of such providers is

through the use of a “winner-take-all” competitive bidding process for a one-time, fixed-cost grant to subsidize the buildout of broadband in areas where it does not exist.

The current demands on the USF undermine the ability to focus on today’s key infrastructure challenge: facilitating the rollout of broadband. As a result, today’s policy leaves broadband outside the scope of subsidized services, despite there being a number of powerful rationales for broadband support. In 2002, FCC Commissioner Michael Copps made the case for broadband subsidies through the USF, concluding that “advanced services *are* essential. Indeed, they are becoming more so with each passing day.”²² Consumers echo this sentiment: a survey of America consumers last fall reported that broadband is the communications service that consumers can “least live without.”²³ Moreover, a number of commentators have championed the importance of widespread broadband deployment on social and economic grounds.²⁴ Unfortunately, second generation universal service policy does not recognize these rationales, and fails to support our national objective of ensuring broadband access to all.

The essential challenge of universal service policy is to rise above the historical anomalies and backward-looking concerns that give rise to the current system. In particular, it is critical for universal service policy to ensure that all Americans are served

²² *Federal State Joint Board on Universal Service*, 18 FCC Rcd 2943, 2999 (Separate Statement of Commissioner Michael J. Copps) (July 10, 2002).

²³ See North American Homes Rate Broadband as Key Wireline Service, IG Online (October 27, 2006), available at <http://www.arm.com/iqonline/news/marketnews/15168.html>.

²⁴ See, e.g., Robert D. Atkinson, *The Case for a National Broadband Policy*, The Information Technology and Innovation Foundation (June 2007); Robert W. Crandall & Charles L. Jackson, *The \$500 Billion Opportunity: The Potential Economic Benefit of Widespread Diffusion of Broadband Internet Access*, Criterion Economics (2001) (estimating that universal broadband adoption could yield annual consumer benefits of \$300 billion); Jed Kolko, *Why Should Governments Support Broadband Adoption?* Working Paper No. 2007.01 at 29, Public Policy Institute of California (Jan. 2007) (suggesting that the recognized benefits of broadband may extend beyond health, education and employment to include online purchasing, which will result in lower prices for consumers who are disadvantaged by the “traditional” retail process.).

by reasonably effective broadband connections and thereby included in our 21st century economy. Similarly, universal service support for wireless connections should prioritize the need to build out service to unserved areas. In short, any universal service policy designed to promote broadband must not follow the flawed second generation universal service strategy used in the ETC context -- allowing subsidies to be provided to multiple firms under a program that leaves the states with no real responsibility or accountability.

Qwest offers here a cost-effective strategy for promoting ubiquitous broadband rollout. Stated simply, Qwest's proposal outlines three principles for supporting broadband deployment. **The first principle** is an emphasis on the importance of universal access to broadband and on funding for only one provider per unserved area to achieve that goal. **The second principle** requires an evaluation of the specific demographics and needs of unserved households. **The third and final principle** is a delegation of authority to the states to administer and manage this universal service program with the use of a "winner take all" competitive bidding process,²⁵ whereby providers would compete for a one time, fixed-cost grant to subsidize the deployment of broadband in areas where it does not exist.

To implement these principles, Qwest proposes a four-step process:

- (1) The development of definitions for "broadband" and an "unserved area";
- (2) The implementation of an effective comprehensive broadband mapping program;

²⁵ For a seminal overview on "competition for the field," see Harold Demsetz, *Why Regulate Utilities?* 11 J.L. & ECON. 55 (1968); see also Dr. Patrick Xavier, *What Rules for Universal Service in an IP-Enabled NGN Environment?*, at 14, International Telecommunications Union (2006) (competitive bidding "can generate incentives to contain costs, to innovate, and to reveal the true cost of delivering universal service thus minimising [sic] the subsidy required.").

- (3) The disbursement of the relevant funds on an annual basis to be divided among the states on the basis of unserved households; and
- (4) A competitive bidding process conducted annually by the states according to federal criteria.

B. The Development of Acceptable Uniform Definitions

There are two threshold inquiries for the development of a strategy for the subsidization of broadband in unserved areas -- the respective definitions of “broadband” and what constitutes an “unserved area.” For the definition of broadband, the FCC’s current standard -- 200 kilobits per second -- needs to be reexamined in light of today’s marketplace realities. Qwest has found that a best effort service of up to 1 megabit per second downstream and up to 512 kilobits per second upstream is appealing to a broad segment of its customer base.²⁶ Similarly, Qwest recommends a level of latency, jitter and packet requirements to ensure that real-time applications (such as voice over IP or video conferencing) capability should be supported by a broadband operator.²⁷ Ideally, the FCC will be able to adopt such a revised definition in its current proceeding on this issue.²⁸ In

²⁶ While any broadband “definition” will contain an element of arbitrariness, Qwest’s experience with a best effort service of up to 1Mbps/512kbps has seemed to strike a reasonable balance between what is achievable, cost effective and meets consumer expectations. The areas eligible for this subsidy will be, by definition, the most high cost and uneconomic places for deployment of broadband.

²⁷ Latency, jitter and packet loss are the main factors that determine service quality for two-way services. Qwest recommends that the broadband operator be required to provide the capability to transmit, from the testable points of the server to the customer interface, with less than 150ms one-way latency, less than 30ms jitter, and less than 1% packet loss. See Time Szigeti & Christina Hattingh, *Quality of Service Design Overview*, Cisco Press (Dec 2004)(available at www.ciscopress.com/articles/article.asp?p=357102&rl=1); ITU-T Recommendation G.114 on One-Way Transmission Time (available at http://www.itu.int/rec/dologin_pub.asp?lang=e&id=T-REC-G.114-200305-I!!PDF-E&type=items).

²⁸ *In the Matter of Development of Nationwide Broadband Data to Evaluate Reasonable and Timely Deployment of Advanced Services to All Americans, Improvement of Wireless Broadband Subscriberhip*

any event, any broadband service provider that met the requisite capability would be eligible to respond to a state's request for a competitive bid on a technologically-neutral basis.

A transparent and uniform definition of what constitutes an "unserved area" will serve three purposes.²⁹ First, such a definition is necessary for the FCC to determine objectively the allocation of grants among the states. Second, a uniform definition would provide the FCC with a "performance metric" for measuring the success of the broadband program, which is consistent with Qwest's view that clear goals and clear measures should guide the management of USF programs.³⁰ Finally, the definition will provide guidance to the states when they determine where to target the federal money within their boundaries. Notably, it will be the role of the states -- and not the FCC -- to target what geographic areas should be subsidized via the USF.

C. Identifying and Evaluating the Needs of Unserved Areas

Once a clear and uniform definition is established, a comprehensive mapping of where broadband options are currently available will be necessary (unless a state has already conducted such an inquiry). This mapping will need to evaluate whether (and where) existing providers do not meet the requisite standard for broadband. The FCC will

Data, and Development of Data on Interconnected Voice over Internet Protocol (VoIP) Subscribership, FCC 07-17, Notice of Proposed Rulemaking, WC Docket No. 07-38 (rel. Apr. 16, 2007).

²⁹ To clarify, support for an unserved area (however it is ultimately defined) would be limited to the funding of broadband service only, regardless of whether the area is eligible for high-cost support under the FCC's rules. Moreover, the FCC would need to determine whether portions of a "seriously underserved" area should be included within the definition -- under certain circumstances, the benefits of drawing strict boundaries to account solely for unserved households may result in greater costs through "broadband gerrymandering."

³⁰ See Qwest USF Comments at 18.

need to provide some guidance and oversee a system whereby state agencies, aided perhaps by industry or individual citizens, can develop comprehensive assessments of where the defined level of broadband service is unavailable.

A threshold issue in any mapping project is what unit of geographic measurement each state should use in conducting its assessment. On that score, Qwest recognizes that the current use of zip codes is problematic; as commentators have pointed out as to current FCC reports, it is questionable to conclude that an area is served by a broadband provider if any part of the relevant zip code enjoys broadband service.³¹ Nonetheless, Qwest submits that the use of zip codes might be the simplest administrative measure to use, and thus recommends allowing states to rely on this measure for the first round of grants and developing a more refined measure to detail the level of broadband penetration for the second round to correct any over- or under-inclusivity.³² Before accepting the use of any alternative measure, the FCC should insist on a metric that is relatively easy-to-use, verifiable, and would not result in a nontrivial delay in the institution of the program proposed here.

The process of mapping the availability of broadband might well prove to be a virtuous project as it would invite input from a state's citizenry and engage their interest on

³¹ See Jed Kolko, *Why Should Governments Support Broadband Adoption?* Working Paper No. 2007.01 at 8, Public Policy Institute of California (Jan. 2007); United States Government Accountability Office, *Broadband Deployment Is Extensive Throughout the United States, but It Is Difficult to Assess the Extent of Deployment Gaps in Rural Areas* (May 2006).

³² James Stegeman, *et al.*, suggest that while an independent geographic area (as opposed to a particular carrier's service area) should be utilized for subsidy auctions, zip codes may be more likely than other boundaries to change over time. Possible alternatives to zip codes include census tracts, census block groups, counties, or metropolitan or rural statistical areas. However, Qwest concedes that each of these options have practical disadvantages. See James Stegeman, Dr. Steve Parsons, Robert Frieden & Mike Wilson, *Controlling Universal Service Funding and Promoting Competition Through Reverse Auctions* at 15-19 (2006).

the subject. For starters, a state (or its designated entity) might well use geographic information system (“GIS”) mapping technology to create an inventory of existing broadband services based on deployment data furnished by broadband service providers, as is the case under the well-publicized ConnectKentucky program.³³ The information furnished to the state would need to be treated as confidential (in order to elicit cooperation) and any publicly available information regarding the provision of broadband service in a state would need not to identify which providers are serving given areas.³⁴ In most cases, providers will be motivated to supply this information to the state to avoid the possibility of competing against a subsidized carrier. Nevertheless, providers that do not supply this information would be prohibited from participating in the competitive bidding process.

In terms of focus, each state would be free to decide where to target support. The virtue of delegating this judgment to the states is that the federal government need not impose a “one-size-fits-all” program. Rather, different states will be authorized to weigh all relevant factors in deciding which areas to target first.³⁵

D. Funding the Program

³³ See Testimony of Brian R. Mefford, President and CEO of Connected Nation, Inc., to the United States Senate Committee on Commerce, Science & Transportation (Apr. 24, 2007).

³⁴ To the extent that a state could not collect such information and treat it as confidential, it would need to designate an entity that could do so on its behalf.

³⁵ Ultimately, it might well be the case that some areas cannot justifiably be subsidized to promote broadband deployment -- *i.e.*, the costs of so doing would far outstrip the relevant benefits. To avoid instituting a program with no such restraint, Qwest expects that the FCC would need to define the level of subsidization that would be rational. Such a level, however, would not be reached within the first several years of the program's existence.

Qwest appreciates that the amount of funds that can be made available for broadband support is necessarily constrained, and that the initiation of a new program to spur the development of broadband to unserved households raises the question of how the already strained fund could sustain such a program.³⁶ Once again, it must be emphasized that Qwest is *not* proposing to expand the size of the fund above current levels. To the contrary, Qwest supports this broadband support only by linking it to other savings in the USF. Qwest therefore recommends the development of a fund chartered at the amount saved through a restriction on wireless lines, as discussed below. Over time, if the existing funds are deemed to be insufficient to spur broadband deployment as quickly as desired, this amount could be increased -- ideally through a program supported by general tax revenues (as is the current Rural Utilities Service ("RUS") loan program), or alternatively through additional cost savings from other universal service programs.³⁷ The overall fund size -- and hence the contribution assessment -- should not increase to fund this new program.

1. Where the Savings to Fund Broadband Support Come From

³⁶ In an ideal world, such a program would be supported by general tax revenues. As two economists explained, "subsidizing universal services through general tax revenues" is "a good option from the standpoint of efficient public finance." Jerry Hausman & Howard Shelanski, *Economic Welfare and Telecommunications Regulation: The E-Rate Policy for Universal-Service Subsidies*, 16 YALE J. REG. 19, 30 (1999); see also ROBERT HAHN ET AL., CHEAP NET PHONES FACE THE THREAT OF A TAX HANGUP (June 2004) (<http://aei-brookings.org/policy/page.php?id=189>) ("Telecom taxation-by-regulation was never a good way for government to raise revenues: It costs the economy more than three times as much as the same amount of money raised through general income taxes."). Similarly, the general rule of thumb is that industry or service-specific taxation programs should target "social bads" or products that society wishes to discourage (say, cigarettes or alcohol), not socially valuable services like communications. Qwest recognizes, however, that the USF is already in place to serve this purpose and, as such, its reorientation to support this important goal constitutes a second best strategy.

³⁷ By way of example, the FCC recently announced that it was "carrying over" \$650 million in unused Schools and Libraries funding from Funding Years 2001-2004 in order to increase disbursements in 2007. Public Notice, *Wireline Competition Bureau Announces Carryover of Unused Funds for Funding Year 2007*, CC Docket No. 02-6 (June 11, 2007). While Qwest applauds the use of these funds, this example suggests that universal service funds can be prioritized and shifted as certain goals of the program are satisfied.

In terms of possible reforms to the current second generation USF program, there are a number of difficult decisions that the FCC will have to face in the years ahead. In any event, however, the ongoing subsidization of multiple wireless carriers for multiple lines to individual households hardly seems like a more valuable use of the USF than spurring broadband deployment to unserved areas. In fact, these subsidies may not even serve to facilitate deployment in “high-cost” areas. In 2004, for example, the Bureau of Labor and Statistics found that 50.5% of rural households and 53.5% of urban households had wireless service, suggesting that the provision of wireless services in these areas was already “reasonably comparable” to urban areas.³⁸ Moreover, according to a recent study by Criterion Economics, subsidized wireless companies “actually provide less coverage than unsubsidized companies serving the same areas.”³⁹ Finally, Criterion Economics concluded that nearly 45% of all study areas receiving universal service support for wireless carriers have median household incomes that are above the national median income.⁴⁰

From a public policy perspective, it is important to appreciate that the current funding priorities need not and should not remain fixed. Moreover, the legal argument that subsidized firms have any reasonable expectation to continued funding was rejected by the Fifth Circuit in *Alenco Communications, Inc. v. FCC*.⁴¹ In that case, the court held the

³⁸ CTIA, *Wireless in Rural America: The Facts* (April 2006); see also NTCA 2006 Wireless Survey Report at 10 (Jan. 2007) (“Seventy percent of [NTCA members responding to the survey] offer a wireless package that they feel is competitive with the national carriers.”).

³⁹ Nicholas Vantzelfde, *The Availability of Unsubsidized Wireless and Wireline Competition in Areas Receiving Universal Service Funds*, Criterion Economics (June 13, 2007).

⁴⁰ Kevin W. Caves & Jeffrey Eisenach, *The Effects of Providing Universal Service Subsidies to Wireless Carriers*, Criterion Economics (June 13, 2007).

⁴¹ 201 F.3d 608 (5th Cir. 2000).

1996 Act “does *not* guarantee all local telephone service providers a sufficient return on investment . . . [it] only promises universal service, and that is a goal that requires sufficient funding of *customers*, not *providers*.”⁴²

To address the lack of strategic focus of USF support, the Joint Board has offered one model of keeping the growth of ETCs under control through an emergency cap. This is a sensible first step, but Qwest believes that it is insufficient to reorient USF priorities to address the compelling needs outlined above. Consequently, Qwest proposes a new restriction that would free up funds for those purposes: a cap on wireless connections that would limit these competitive ETCs to support for a single line per household (or business) on a per company basis.⁴³ This strategy would thus authorize funding for the first wireless connection on the ground that it was either a substitute service to a wireline connection or worth supporting as a complementary one. It would significantly curtail, as Joint Board member Billy Jack Gregg put it, “supporting multiple wireless networks which supplied supplementary, rather than substitute services.”⁴⁴

⁴² *Id.* at 620 (emphasis in original). Moreover, the court explained, “[w]hat petitioners seek is not merely predictable funding mechanisms, but predictable market outcomes. Indeed, what they wish is protection from competition, the very antithesis of the Act.” *Id.* at 622.

⁴³ As to this proposal, Qwest recognizes the possible objection that it, strictly speaking, treats the wireless CETCs differently than incumbent providers and thus violates the competitive neutrality principle. This proposal does, however, follow the path suggested by the Joint Board, which is to recognize that the significant differences between incumbent firms and CETCs means that competitive neutrality does not require an identical set of rules for each. Joint Board Recommendation at ¶ 6. *See also TCG New York, Inc. v. City of White Plains*, 305 F.3d 67, 80 (2d Cir. 2002) (competitive neutrality “does not require precise parity of treatment.”). Moreover, the principle of competitive neutrality was adopted by the FCC pursuant to 47 U.S.C. § 254(b)(7), is not required by statute and thus is subject to change should the FCC have a good reason for doing so. *See Federal-State Joint Board on Universal Service First Report and Order*, 12 FCC Rcd. 8776, 8801 ¶ 46 (1997).

⁴⁴ Testimony of Billy Jack Gregg, Director Consumer Advocate Division, Public Service Commission of West Virginia, Before the Communications Subcommittee, Senate Commerce, Science, and Transportation Committee (March 1, 2007), at 9.

Qwest's proposed approach recognizes that the funding of a second, third, or even fourth wireless line should be weighed against the alternative uses of that funding. Family plans may be extraordinarily popular for a number of reasons, but it is quite possible that such plans are marketed aggressively in this context in order to reap a windfall for the subsidized carrier who receives a payment based on the costs of the wireline connection. According to a recent article in the *Ericsson Business Review*, family plans count for nearly 50% of all wireless subscriptions.⁴⁵ Assuming that CETCs enjoy similar levels of subscribership, and based on the Joint Board's projected CETC funding for 2007 in the amount of \$1.28 billion (or even a figure slightly lower than that depending on the date the cap goes into effect), the implementation of this plan could create roughly \$500 million for the funding of broadband.

2. *How the One Wireless Connection Restriction Fits With Suggested Reforms*

Qwest recognizes that there are other plausible reforms that would curtail the use of USF to support wireless ETCs. Nonetheless, we propose the single wireless connection restriction on the ground that it appears to be the most tractable one to implement. Some have argued, for example, that the FCC should investigate the appropriate cost basis for USF support for wireless ETCs and restrict them to a subsidy below that of the incumbent wireline provider (as is required under "the identical support rule").⁴⁶ Qwest agrees that this reform is particularly compelling for areas like Hattiesburg, where the lack of any true

⁴⁵ See David Wilson, *All in the Family*, *Ericsson Business Review* (Jan. 2007) (stating that family plans accounted for less than 10 percent of the U.S. wireless market in 2003, but now account for 41 percent of adult wireless plans, and are projected to account for 52 percent of the wireless market in 2008).

⁴⁶ See *In the Matter of High-Cost Universal Service Support*, Comments of The National Association of State Utility Consumer Advocates on "Long-Term, Comprehensive High-Cost Universal Service Reform," at 19-23 (May 31, 2007); Comments of the Consumers Union, Consumer Federation of America and Free Press at 56-57 WC Docket No. 05-337 (May 31, 2007).

cost-basis for the subsidy is question-begging. To be sure, such proposals are worthy of investigation, but Qwest has focused on a restriction that should be relatively easy to implement and can allow the Commission more time to evaluate other possible changes. In the meantime, by adopting Qwest's proposal, the Commission will have shifted the priorities of an already strained fund in a manner that will address vital policy objectives.

E. Disbursement of Funds

As for the disbursement of funds under a broadband universal service program, Qwest recommends a system that would be managed through a formula where each state receives a percentage of the available funds based on the relative number of unserved customers within its borders. In particular, a state would receive funding for its total number of unserved households as a percent of the national total of unserved households. If, for example, State X had a total of 2 million households, only 1.6 million of which had access to broadband, it would receive a share based on .4 million unserved households divided by the total national underserved households. If, for example, the number of national unserved households were 20 million, State X would receive $.4/20$ or 2% of the total available funds. Thus, under a \$500 million fund, this would mean a \$10 million budget for State X in year 1.

F. Empowering States to Manage the Broadband Universal Service Program

In designing the framework for a state-managed system, it is critical that states be guided by both appropriate incentives and thoughtful guidance. To that end, the 1996 Act clearly contemplates an important oversight role for states, so long as state policies to

support universal service do not conflict with federal regulations.⁴⁷ On the issue of incentives, it is important that states be allowed and encouraged to supplement the available federal funds with dedicated state funds, as some states have already done.⁴⁸ Consequently, the level of funding per state should be fixed at the second year of the program (when states are permitted to adopt a more refined measure to zip codes) and continue in that fixed proportion until a state reaches the defined level of economically justifiable broadband deployment. A state should not, by contrast, be penalized for supplementing the federal program with its own in the form of decreased federal support in light of increased state broadband penetration.

The management of a competitive bidding process for the disbursement of broadband support will require careful planning by the FCC and effective implementation at the state level. To date, the use of competitive bidding in the communications sector has been relatively limited, and it is therefore important that the FCC take the best lessons from the different experiments. It also is important to appreciate that much of the criticism directed at the so-called “reverse auctions” used to determine the appropriate level of universal service support reflects the concern that such auctions are a mismatch for the

⁴⁷ See 47 U.S.C. § 254(f); see also *Qwest Corp. v. FCC*, 258 F.3d 1191, 1203 (10th Cir. 2001) (“The Telecommunications Act plainly contemplates a partnership between the federal and state governments to support universal service . . . Thus, it is appropriate – even necessary – for the FCC to rely on state action in this area.”).

⁴⁸ By way of example, the states of Idaho and Utah have established rural broadband grant programs through legislative initiatives. In 2006, the Idaho legislature enacted Senate Bill 1498 establishing the Rural Idaho Broadband Investment Program for the purpose of making monetary awards, on a cost reimbursement basis, to eligible applicants for rural broadband investment projects selected for funding. In 2007, the Utah legislature enacted Senate Bill 268 establishing the Rural Broadband Service Fund to be used for grants to providers deploying broadband service in rural areas.

scenario where an incumbent provider has already built out its infrastructure.⁴⁹ In that scenario, there is a big question as to whether a bidding process will undermine decades of investment by allowing existing infrastructure to be abandoned. As to the development of new infrastructure, the experience of other countries' use of competitive bidding to deploy communications service to remote areas suggests that no such concern exists, and that a bidding process can be a very effective model for selecting the most efficient provider of a subsidized service.⁵⁰

In essence, the competitive bidding model asks the state agency to make a firm offer to award a contract to the qualified bidder that submits the "lowest" subsidy request. That subsidy request would be in return for a commitment to provide broadband service to a particular area -- using any technology available -- for ten years at reasonably comparable rates to the statewide average price. For the firm with the winning bid, the state would provide for universal service support to help to offset that operator's costs through a payment schedule that would be contingent upon a provider meeting its contractual commitments.⁵¹ Specifically, to provide financial incentives for deployment

⁴⁹ See, e.g., Dale E. Lehman, *The Use of Reverse Auctions for Provision of Universal Service* at 1 (Oct. 10, 2006) (notably, however, Professor Lehman states that "reverse auctions are feasible, and have met with some success, for provision of new infrastructure/services into previously unserved areas, or for the upgrading of existing infrastructure and/or services.").

⁵⁰ See, e.g., James Stegeman, Dr. Steve Parsons, Robert Frieden & Mike Wilson, *Controlling Universal Service Funding and Promoting Competition Through Reverse Auctions* at 8-9 (2006) ("[Competitive bidding] has been employed for voice telecommunications and/or Internet infrastructure and services development in Australia, Brazil, Chile, Columbia, the Dominican Republic, El Salvador, Guatemala, Guyana, India, Nepal, Nigeria, Peru, and Uganda. In most instances these reverse auctions were successful, and in some instances stunningly so, in achieving their universal service objectives."); Siddhartha Raja, *Funding Universal Service: A Case for Subsidy Auctions* (2003).

⁵¹ As Verizon and Verizon Wireless have noted, broadband investments "require large up front capital outlays rather than ongoing expenses. Incenting broadband infrastructure development is a different kind of challenge than providing sustained, ongoing support to maintain affordable universal service." Verizon USF Comments at 17.

and ongoing performance, Qwest recommends an approach similar to that adopted in Peru, where the winners of a competitive bidding process to deploy telecommunications services to rural areas receive 35 percent of the total subsidy payment at the start of a project, another 25 percent once facilities are installed, and the remaining 40 percent in semiannual installments over a period of five years.⁵²

From an economic perspective, the contract between the state and the selected provider will need to create certain contract enforcement mechanisms once the winning bidder is selected. In this contract, the state will have some discretion at the front-end to select a partner to provide service to an unserved area, but once that partner is selected, the partner and the state are forced to live with one another. In such a context, it is essential that sophisticated contracts are developed at the front-end to protect both partners from “after-the-fact opportunistic behavior.”⁵³ On the side of the bidder, there must be clearly delineated requirements as to the technical and financial qualifications of the bidding entity, the nature of the service to be provided (*i.e.*, scope of the service area), the deadline of the required build-out, the level of service to be provided, and other material terms and conditions. As for the state, there also must be enforcement protections available to ensure compliance, including the use of performance bonds and/or liens on the provider’s infrastructure. Rather than ask each state to develop its own template for this potentially complex contractual arrangement, the FCC should initiate a rulemaking to set the

⁵² See Geoffrey Cannock, *Expanding Rural Telephony: Output-Based Contracts for Pay Phones in Peru*, in *Contracting for Public Aid: Output Based Aid and its Applications*, 15 (World Bank 2001).

⁵³ Notably, such protections are often provided in the form of stylized “hostage exchange” scenarios, where each side gives something of value to the other and can threaten to keep it in the event the other side acts unreasonably. See OLIVER WILLIAMSON, *THE MECHANISMS OF GOVERNANCE* (1996). Performance bonds, for instance, are one such hostage institution in that they enlist a third-party bonding agent to ensure a credible commitment to perform.

appropriate auction rules (as it does for auctions for spectrum licenses) and draft a model contract for states to adopt and enforce.

In conducting the competitive bidding process, states will need to use their latitude to prioritize and manage bids to provide service to unserved areas. States will be given only a portion of the necessary amount to initiate deployment in year one -- say, \$10 million dollars for the hypothetical State X above. To ensure that subsidies are used as efficiently as possible, and to deter a single bidder from attempting to “overbid” the subsidy amount, it is quite possible that a given state will need to either: (1) identify, but not publicize, a reservation price for a select number of unserved areas and target them for a subsidy based upon the reverse auction, or (2) reject “winning” bids that the state deems to be excessive based on the projected impact on available funds.⁵⁴ We highlight this point not because these are necessarily the only two ways to manage the issue, but to illustrate the type of questions that will need to be addressed to ensure an effective bid process. To that end, Qwest recommends not prescribing any given set of auction rules until they are thoroughly evaluated -- such as the FCC did for the initial auctions for spectrum licenses.⁵⁵

⁵⁴ The rejection of winning bids is proposed as an alternative option because the establishment of a reservation price will necessarily entail the use of cost modeling or some rough proxy to set a reasonable reservation price. Over a relatively short period of time, however, Qwest anticipates that these information asymmetries will be ameliorated, as the competitive bidding process and information sharing between states helps to identify precisely the appropriate amount of subsidy for a given area.

⁵⁵ As with the design of the auctions for spectrum licenses, the competitive bidding process suggested here can be informed by game theory and experimental economics -- as well as an examination of the experiences with competitive bidding processes around the world. It is clear, for example, that reserve price auctions induce different bidding behaviors than non-reserve price auctions, meaning that the FCC is advised to investigate the different dynamics of such alternatives before instituting a particular set of requirements for the states to follow. Moreover, in cases where the optimal strategy is unclear, the FCC can provide the states with discretion -- either up front or in the form of allowing waivers to its directives -- in terms of how they manage a competitive bidding process.

After year one, the states will undoubtedly learn more about how the bid process can be managed effectively, will have a better understanding of the costs involved in deploying broadband services to unserved areas, and will be better able to develop priorities for year two. In managing the competitive bidding process, states will be advised to provide adequate notice to all possible bidders, allowing them to develop their business plans and inviting competition at the front-end of process that, in effect, substitutes for the lack of competition at the back-end. Moreover, advance notice of that process is crucial so that states will have sufficient time to certify qualified bidders in advance of the actual bidding process.

In addition to conducting the bidding process, Qwest envisions that the state will also play a crucial role in enforcing the terms of the grant agreement. Without credible and effective enforcement, this program will be greatly compromised and broadband providers will be tempted to breach their bargained-for-terms *vis-à-vis* building out and providing the agreed-upon terms of service using whatever technology they propose. Consequently, state agencies will need to develop effective procedures for overseeing the terms of service and compliance with the relevant requirements as well as a willingness and ability to use the available remedies to sanction and remedy noncompliance. Requiring performance bonds and delimiting subsidy terms with clear, self-executing performance triggers will thus be key to making the auctions successful over the term of the subsidy award.

G. A Pilot Program for Areas Unserved By Wireless Providers

As discussed above, the current universal service program already provides and continues to provide support to wireless providers offering multiple connections. Many of

these carriers receive subsidies in areas already served by multiple wireless firms. This second generation universal service policy, particularly when contrasted with the lack of a strategic focus on households and businesses unserved by wireless providers, needs to change. Thus, Qwest proposes not only a new model for spurring the deployment of broadband to unserved areas, but also the development of a pilot project to spur the development and deployment of wireless services to unserved areas. This program, in short, would operate on exactly the same principles as the broadband program outlined above, albeit on a considerably more limited scale. In particular, Qwest recommends that the FCC allow states to petition for the right to use a portion of the broadband fund provided to them to be used in this fashion.

* * *

Given its statutory charge, the FCC has the opportunity and responsibility to implement a viable strategy for ensuring universal broadband deployment (such as that outlined above). Under Section 254 of the 1996 Act, Congress has directed the FCC to provide support for advanced services. In particular, Section 254(b)(2) of the Act emphasizes that the FCC must base its universal service policies on the principle that “advanced telecommunications and information services should be provided in all regions of the nation.”⁵⁶ Moreover, Section 254(b)(3) of the Act dictates that consumers in high-cost areas should have access to “advanced communications and information services” that are reasonably comparable to those services provided in urban areas.⁵⁷ In yet another sign that advanced telecommunications and information services can be supported by universal

⁵⁶ 47 U.S.C. § 254(b)(2).

⁵⁷ 47 U.S.C. § 254(b)(3).

service, Section 706 of the Act specified the goal of “encourag[ing] the deployment on a reasonable and timely basis of advanced telecommunications capability to all Americans.” Finally, if the FCC takes this important step, both Congress and select states may follow its lead and step up to provide additional funding for this initiative, ensuring that ubiquitous broadband penetration is achieved sooner rather than later.⁵⁸

IV. Conclusion

Our second generation system of universal service has, since the enactment of the 1996 Act, largely functioned on autopilot. With its recommendation of an emergency cap, the Joint Board has recognized that the current course, with its unconstrained funding of wireless ETCs, is unsustainable. Qwest urges the FCC to go two steps farther and acknowledge that the current support being provided to wireless ETCs in many contexts is unjustified and that the failure to support the deployment of broadband and wireless connections in unserved areas must be addressed. In moving to implement the proposed emergency cap, we urge the Commission not to leave unaddressed the misguided priorities of the current system. By adopting Qwest’s proposal for a third generation USF strategy to

⁵⁸ Among other salutary benefits, the FCC’s institution of the Qwest proposal would provide a blueprint for a refocused RUS program for loans to broadband providers. Notably, that program has been criticized for failing to prioritize unserved areas and offering support to firms entering areas where multiple providers are already offering service. *See, e.g., Qwest Urges End to RUS Broadband Loans for Competitors*, TR Daily (Feb. 22, 2007) (criticizing the provision of taxpayer-subsidized loans to applicants who serve, or plan to serve, markets where broadband is already available); Testimony of William R. Deere, U.S. Telecom Association, before the House Small Business Committee (May 9, 2007) (stating that the primary weakness of the current RUS program is that it does too little for area with no access to broadband, and noting that the RUS administrator must issue a “nonduplication finding” prior to issuing a loan under the RUS telephone program). Responding to this criticism, Congress is now considering a number of proposals to reform the RUS program. For instance, under the Rural Broadband Improvement Act of 2007, introduced by Senators Ken Salazar (D., Colorado) and Pat Roberts (R., Kansas), RUS funds would be targeted to rural areas that lack broadband providers. This legislation would also create a grant program that would expand opportunities for state-private partnerships to map where broadband service is available. *See Senators Unveil Legislation to Revamp RUS Program*, TR Daily (May 21, 2007).

spur broadband to unserved areas, the Commission can recognize that broadband -- the fundamental technology of the twenty first century economy -- must be supported in a rational and cost effective fashion, as well as take the crucial steps to bringing must-needed rationality to the manner in which wireless ETCs are supported.