

Sept. 28, 2011

Chairman Julius Genachowski
Commissioner Michael Copps
Commissioner Robert McDowell
Commissioner Mignon Clyburn
Federal Communications Commission
445 12th St. SW
Washington, D.C. 20554

Re: Notice of *Ex Parte* presentation in: WC Docket No. 10-90; WC Docket 07-135;

GN Docket No. 09-51; CC Docket 01-92; WC Docket No. 05-337; CC Docket 96-45;

WC Docket No. 03-109

Dear Mr. Chairman and Commissioners:

The Schools, Health and Libraries Broadband Coalition ("SHLB Coalition")¹ supports transitioning the High-Cost Fund and Connect America Fund (CAF) to support broadband services in rural and high-cost areas. Deploying high-capacity broadband networks to community anchor institutions² in these areas will promote several important national purposes, such as education, economic development, health and wellness, job training and support, public safety and access to e-government. However, the 4 Mbps benchmark that the FCC established for residential users is far too low for most community anchor institutions. Broadband providers that receive CAF support in rural areas should be required to deploy high-capacity broadband to anchor institutions so that those institutions can adequately serve their communities. Furthermore, we strongly oppose any effort to use funds from the underfunded E-Rate program to subsidize the mission of the CAF. The E-Rate program and the CAF are two separate programs, with different missions, that must remain separate and distinct.

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¹ The SHLB Coalition includes a wide range of entities that share the goal of promoting affordable, open, high-capacity broadband to community anchor institutions. A full list of our members is available at www.shlbc.org.

² As the FCC has previously recognized, anchor institutions include community colleges, colleges and universities, town halls, federal and corporate research laboratories, libraries, museums, K12 schools, hospitals, and clinics. See, Notice of Proposed Rulemaking and Further Notice of Proposed Rulemaking, FCC 11-13, released February 9, 2011 ("CAF NPRM"), note 248.

The Federal Communications Commission (FCC) specifically recognized the important needs of community anchor institutions in paragraphs 148-149 of the NPRM in this proceeding³ and invited comment on a variety of ways to meet those needs.⁴ We believe that the most realistic and cost-effective approach is to leverage the CAF dollars to ensure that recipients of CAF support provide community anchor institutions with high-bandwidth connections over network infrastructure that is shared with residential consumers. In other words, we are not seeking additional dollars or separate networks dedicated to anchor institutions; instead, we request that recipients of CAF funding include anchor institutions' needs for high-capacity broadband in their network design and deployment.

1. E-Rate Funds Should Not Be Used to Accomplish the Mission of the Connect America Fund.

We categorically oppose any proposal that would use funds allocated for the E-Rate program to support the Connect America Fund. The E-Rate program is already underfunded; since the program started in 1997, the demand for E-Rate funding has exceeded the amount available in every year but one. While the FCC recently decided to raise the E-Rate cap slightly based on inflation, the demand for E-Rate funds continues to be much higher than the cap, and this demand is likely to grow in the future.

The E-Rate program is fundamentally distinct from the Connect America Fund. One way to state the difference is as follows: the E-Rate program is intended to (a) provide discounted telecommunications and Internet access services to b) end users (certain schools and libraries) that are located (c) across the United States. In contrast, the proposed Connect America Fund is intended to support the (a) deployment of broadband networks by (b) broadband providers only in (c) high-cost and rural areas. Furthermore, the E-Rate program can only support certain schools and libraries, while the Connect America Fund can support broadband networks to all anchor institutions, including higher education, health care providers, public safety, public media and others. While the proposed Connect America Fund and the existing E-Rate program would be complementary, funds from one program cannot be used for the other because their missions and scope are very different.

³ *See, CAF NPRM,* paras. 148-149.

⁴ See CAF NPRM, para. 149 ("Should USF recipients have any obligations to serve anchor institutions, such as health care facilities or community centers, in the communities in which they serve residential customers?") ⁵ See USAC website, available at http://www.usac.org/sl/. (last visited Sept. 27, 2011).

2. The Commission Should Leverage the Connect America Fund to Ensure that Community Anchor Institutions' Needs for High-Capacity Broadband Are Incorporated into the Design of Rural Broadband Networks.

As we have demonstrated in several previous filings, community anchor institutions face a severe shortage of available broadband services today. We cannot continue the status quo because the market cannot be relied upon to provide sufficient high-bandwidth networks to anchor institutions, as shown by the following:

- The National Broadband Plan found that 29% of the 3700 rural health care clinics were
 located in areas where mass-market broadband was not available. The Plan then noted
 that most health clinics need much greater capacity than the 4 Mbps capacity typically
 available to households, so the number of rural health clinics who do not have access to
 high-capacity broadband is much higher than 29%.⁶
- The National Broadband Map developed jointly by the FCC and the National Telecommunications and Information Administration (NTIA) stated that anchor institutions are "largely underserved."
- The State Educational Technology Directors Association (SETDA) found that most schools have less broadband capacity than the average home. 8
- A study performed by Lieberman Research Worldwide on behalf of the Bill & Melinda Gates Foundation found that 62% of public libraries had a broadband connection at 3 Mbps or less. Rural libraries had much slower connection speeds than urban or suburban libraries – 77% of rural libraries had connections less than 5 Mbps, compared to 46% of urban and 59% of suburban libraries.⁹

We appreciate that the FCC is focused on improving residential broadband subscribership, and the SHLB Coalition shares that goal. In fact, community anchor institutions can help achieve the FCC's residential broadband adoption goals (if they have adequate bandwidth) because anchor institutions provide training to new broadband users and make available broadband applications that increase the value proposition to residential customers. ¹⁰

⁶ National Broadband Plan, Chapter 10.

⁷ "COMMERCE'S NTIA UNVEILS NATIONAL BROADBAND MAP AND NEW BROADBAND ADOPTION SURVEY RESULTS," NTIA Press Release, Feb. 17, 2011 (available at http://www.ntia.doc.gov/press/2011/NationalBroadbandMap 02172011.html).

⁸ "High-Speed Broadband Access for All Kids; Breaking Through the Barriers," Report by the State Educational Technology Directors Association (SETDA), June 2008, p. 6.

⁹ Broadband Assessment Project, National Summary Findings, September 17, 2009.

¹⁰ See list of Public Computer Center Grants (http://www2.ntia.doc.gov/computercenters) and Sustainable Broadband Adoption Grants (http://www2.ntia.doc.gov/sustainableadoption).

We also appreciate that the Commission is trying to keep the size of the reformed Universal Service Fund (USF) close to the size of the existing Fund. For this reason, we are not requesting a specific amount of dollars to be allocated to serve the needs of anchor institutions, and we are not requesting the creation of separate networks dedicated to anchor institutions. Rather, we believe the needs of anchor institutions can be accommodated by leveraging the Connect America Fund to encourage the aggregation of anchor institutions and residences onto shared networks, with sufficient capacity provided to anchor institutions.

Therefore, we respectfully request that the Commission require CAF funding recipients to include anchor institutions' needs in the design and of the network build-out. Because there are roughly 325 to 575 homes for every anchor institution, incorporating the needs of anchor institutions into the <u>design</u> of the network will take advantage of the efficiencies of shared networks and will not impose significantly additional costs on broadband providers or require additional funding from the USF. ¹¹

3. As a Guideline, Community Anchor Institutions Should Be Provided with a Minimum of 1 Mbps per Connected Computer or 4 Mbps per Institution, Whichever Is Greater.

The SHLB Coalition has submitted several sets of comments in this proceeding¹² and has previously provided many examples demonstrating that a 4 Mbps standard designed for residences is inadequate for anchor institutions to provide the essential educational, medical and informational services needed by their communities. Anchor institutions are "multi-user environments" – multiple computers at these locations are in use simultaneously, usually sharing the same broadband connection. The FCC's own Household Broadband Guide recommends that a location with <u>four</u> computers should have a 6-15 Mbps connection if just <u>one</u> of those computers is used for a high-demand application, such as streaming High-Definition video, video conferencing, or online gaming.¹³ In fact, the National Broadband Plan set a goal of 1 Gigabit per second for all community anchor institutions by the year 2020.

The SHLB Coalition previously suggested that recipients of CAF financial support must provide anchor institutions with enough high-capacity broadband services to meet their needs, and we provided many examples of rural anchor institutions that require much higher bandwidth than the proposed 4 Mbps benchmark. While the exact amount of broadband capacity that is needed varies depending upon the specific needs of that institution, we recently suggested

¹¹ See, SHLB Coalition filing in this proceeding on Aug. 24, 2011, p. 15.

¹² See, SHLB Coalition filings in this proceeding on July 12, 2010; April 18, 2011; and Aug. 24, 2011.

¹³ Household Broadband Guide (http://www.fcc.gov/guides/household-broadband-guide).

¹⁴ See, SHLB Coalition filing in this proceeding on Aug. 24, 2011, pp. 7-10.

that providing a minimum of 1 Mbps per Internet-enabled computer would be a reasonable and affordable guideline to use in deploying a broadband network today. This recommended guideline should be revised upward over time, as the broadband needs of anchor institutions will continue to grow and their broadband capacity must be scalable to meet this future demand.

4. Conclusion

Accordingly, given the needs of anchor institutions for more than 4 Mbps capacity, coupled with the fact that the market has failed to provide anchor institutions with the capacity they need to meet the needs of their communities, we respectfully request that the FCC adopt a requirement in this proceeding that each Connect America funding recipient submit an annual ascertainment, certification, and/or reporting requirement that it is providing at least 1 Mbps broadband service per broadband-connected computer, scalable upward as demand grows, to all anchor institutions in its service territory.

This requirement will significantly improve the capability of health care providers, libraries, public safety, public media, schools, museums and other anchor institutions to serve their communities. Including anchor institutions in the broadband network design will best leverage the limited resources of the Fund, take advantage of the efficiencies of shared infrastructure, have important economic stimulus benefits for rural communities across America, while working within the size of the overall USF.

Sincerely,

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¹⁵ In the few cases in which an anchor institution has fewer than 4 computers, the broadband provider should be required to provide a minimum of 4 Mbps to that institution. Since it will be already deploying at least that amount of bandwidth to the surrounding residences, there is no reason to build less capacity to the anchor institution than it is providing to the neighboring homes.