

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, DC 20554**

In the Matter of

Lifeline and Link Up Reform and  
Modernization

Telecommunications Carriers Eligible for  
Universal Service Support

Connect America Fund

WC Docket No. 11-42

WC Docket No. 09-197

WC Docket No. 10-90

**COMMENTS OF QUALCOMM INCORPORATED**

Dean R. Brenner  
Senior Vice President, Government Affairs

John W. Kuzin  
Senior Director, Regulatory

1730 Pennsylvania Avenue, NW  
Suite 850  
Washington, DC 20006  
202.263.0020

August 31, 2015

## CONTENTS

|   |   |
|---|---|
| INTRODUCTION & SUMMARY.....   | 2 |
| DISCUSSION.....   | 3 |
| I.    Lifeline Support For Mobile Broadband Is Key To Modernizing The Program<br>And Enabling Today’s Low-Income Families To Participate In The Information<br>Age..... | 3 |
| A.    Mobile Broadband Connectivity Can Readily Solve The “Homework Gap”<br>Currently Plaguing Low-Income Students.....   | 4 |
| B.    Any FCC Minimum Service Standards Must Allow For Mobile Broadband Use..   | 7 |
| CONCLUSION.....   | 8 |

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, DC 20554**

In the Matter of

Lifeline and Link Up Reform and  
Modernization

Telecommunications Carriers Eligible for  
Universal Service Support

Connect America Fund

WC Docket No. 11-42

WC Docket No. 09-197

WC Docket No. 10-90

**COMMENTS OF QUALCOMM INCORPORATED**

Qualcomm Incorporated (“Qualcomm”) hereby submits these comments in response to the Commission’s *Second Further Notice of Proposed Rulemaking* seeking to modernize the Lifeline Program.<sup>1</sup> Qualcomm wholeheartedly agrees with the FCC that the Program needs to reflect the realities of the 21<sup>st</sup> Century communications marketplace and should be upgraded as soon as possible to support mobile broadband connectivity to enable low-income students to keep pace with classmates who engage in 24/7 learning using the latest mobile broadband-enabled devices and to provide low-income individuals’ access to telemedicine and online job application portals that many large U.S. employers exclusively rely upon. There is no question that broadband “is necessary for even basic participation in our society and economy,”<sup>2</sup> and the FCC should incorporate mobile broadband access into the Lifeline Program without delay.

---

<sup>1</sup> See *Lifeline and Link Up Reform and Modernization*, WC Docket No. 11-42, Second Further Notice Of Proposed Rulemaking, Order On Reconsideration, Second Report And Order, And Memorandum Opinion And Order, FCC 15-71, (rel. June 22, 2015) (hereinafter “*Second FNPRM*”).

<sup>2</sup> *Id.* at ¶ 5.

## **INTRODUCTION & SUMMARY**

Millions of low-income students and their families, who are the focus of the Lifeline Program, are unable to afford anywhere/anytime broadband access that is needed to participate in today's information economy and thus remain at a severe disadvantage. As the FCC recognizes in the *Second FNPRM*, today's successful students constantly use mobile broadband tools outside of school hours, at home, on the school bus, and elsewhere, to complete assignments, watch instructional videos, collaborate with classmates and teachers, and perform research. The Lifeline Program must be upgraded to support mobile broadband connectivity so that the existing mobile educational divide, which the FCC refers to as the "Homework Gap," does not widen.

There is no question that providing 24/7 mobile broadband connectivity to students dramatically improves educational outcomes. We know this because the FCC Learning-On-the-Go ("LOGO") pilot program conducted under the FCC's E-rate program, which provided students and community members in 19 school districts and one library with anywhere/anytime mobile broadband connectivity, was a resounding success. Participating schools reported improved test results, enhanced student engagement, and useful and engaging interactions among students and teachers. LOGO pilot program participant Onslow County Schools in North Carolina explained that the "availability of a mobile device in the hand of every student ... enabled and empowered the teachers and the students to think innovatively about instruction and classroom practice, and to provide a dramatically differentiated learning environment for every student." Perhaps most importantly, LOGO participants noted that mobile technology directly tied students' views of the importance of success in school to their own future success. The FCC needs to build on this success by funding via the Lifeline Program mobile broadband connectivity for low-income families and students.

## DISCUSSION

### **I. Lifeline Support For Mobile Broadband Is Key To Modernizing The Program And Enabling Today's Low-Income Families To Participate In The Information Age**

In today's mobile broadband-fueled world, low-income consumers are increasingly choosing mobile broadband connectivity to meet their educational, medical, employment, and general communications needs. They recognize the substantial value that mobile providers provide at very competitive prices, which are the direct result of the intense level of competition in the mobile marketplace. Notwithstanding, as the Commission notes, many low-income consumers still lack Internet access at home. U.S. households with incomes below \$50,000 make up 40 percent of all families with school-age children and a staggering 31 percent of those households (*i.e.*, more than 3.5 million homes) do not have a broadband connection at home.<sup>3</sup>

The Lifeline Program should support be updated to support mobile broadband connectivity to these low-income students and their families because in many cases mobile will be the most economical means of providing broadband Internet access. Moreover, mobile broadband can play an important role in closing the "homework gap," as demonstrated by the E-rate Mobile Broadband LOGO Pilot program<sup>4</sup> and by the popularity of mobile services, devices, and applications among the many millions of today's successful students. Also, to address concerns that the Lifeline Program may be subject to abuse and fraud, there are a number of

---

<sup>3</sup> See *Second FNPRM* at ¶ 19. See Benjamin Herold, "Homework Gap' for Hispanics Targeted in New Broadband-Awareness Initiative," EDUCATION WEEK (Aug. 11, 2015) (Analysis of 2013 American Community Survey data by Pew Research Center shows 72 percent of Hispanic households and 72 of African American households with school-age children have a high-speed connection at home, compared to 88 percent for whites and 92 percent for Asians).

<sup>4</sup> See, *e.g.*, Katy Independent School District LOGO Final Report; City School District of New Rochelle, NY, EDU2011 Final Report; Onslow County Schools LOGO Final Report; San Diego Unified School District LOGO Final Report; in WC Docket No. 10-222 (posted Oct. 22, 2013).

technology options available today to control mobile broadband access to intended content and approved uses.

**A. Mobile Broadband Connectivity Can Readily Solve The “Homework Gap” Currently Plaguing Low-Income Students**

Mobile broadband connectivity can play a key role in bridging the “Homework Gap” that is plaguing low income students today. As the FCC explains, while there are initiatives working to close the “Homework Gap” by expanding broadband access to underserved populations, including low-income students, “none of these initiatives provide for a comprehensive, nationwide solution” for addressing the issue.<sup>5</sup> The Lifeline Program should be that solution.

There can be no doubt that the “Digital Divide” and “Homework Gap” will widen if low-income students and their families are not able to access mobile broadband. Today’s successful students have integrated into their learning toolbox highly advanced mobile devices and applications that they use to complete homework, perform research, interact with teachers and classmates, watch educational videos, and fully engage with the online world. Students who lack such mobile connectivity, devices, and applications will continue to lag behind.

In 2010, the FCC established the Learning On-The-Go (“LOGO”) wireless pilot program under the E-rate program to study the merits of enabling innovation in learning outside the boundaries of school buildings and the traditional school day by providing anywhere/anytime mobile broadband connectivity to students and teachers.<sup>6</sup> Nearly one hundred entities applied for LOGO funds, and the Commission chose 20 pilot programs to fund. The LOGO pilot program reports that participants filed with the Commission provide solid confirmation that

---

<sup>5</sup> See *Second FNPRM* at ¶ 21.

<sup>6</sup> See *Second FNPRM* at ¶ 5 n.18; see also *E-rate Deployed Ubiquitously 2011 Pilot Program*, Order, WC Docket No. 10-222, DA 11-1181 (July 11, 2011).

providing 24/7 access to mobile broadband connectivity enormously improves educational outcomes for students.<sup>7</sup> Participating schools reported improved test scores, enhanced student engagement, improved attendance, and deeper connections among students and between students and teachers. LOGO participants also noted that mobile technology improved students' views of the importance of school to their future success, which is perhaps the most important outcome.<sup>8</sup>

The Lifeline Program should build on these successes by ensuring low-income students have access to the mobile broadband tools that are essential to succeeding in the 21<sup>st</sup> Century digital economy. In fact, dozens of parties filed comments in the FCC's E-rate proceeding urging the Commission to provide funding to give students anytime/anywhere access to mobile broadband connectivity.<sup>9</sup> These well-informed commenting parties, ranging from school

---

<sup>7</sup> See n.4, *supra*.

<sup>8</sup> The San Diego Unified School District ("SDUSD") experienced particularly remarkable results: improved test results, increased student and parent engagement, and improved teacher satisfaction. SDUSD carefully planned the rollout of its pilot program and conducted workshops for teachers and administrators on how to best incorporate mobile learning tools into their curricula as well as training for parents to oversee student usage at home. See San Diego Unified School District LOGO Final Report; in WC Docket No. 10-222 (posted Oct. 22, 2013).

<sup>9</sup> See WC Docket No. 13-184 – Modernizing the E-rate Program Comments (filed Sept. 2013): Comments of Software & Information Industry Association at 8; Comments of Digital Learning Institute (Beverly Eaves Perdue) at 2, 6-7; Comments of eBackpack, Inc. at 3; Comments of Xirrus, Inc. at 3; Comments of VectorUSA at 5; Comments of Telecommunications Industry Association at 4; Comments of State Educational Technology Directors Association at 19, 23; Comments of Sprint Corp. at 10, 12-14, 20, 22; Comments of SmartEdgeNet, LLC; Comments of Qualcomm Incorporated at 2, 3, 7, 10-13, 17-18; Comments of Project Tomorrow at 5-7; Comments of University of Michigan (Prof. Soloway) and University of North Texas (Prof. Norris) at 1; Comments of New\_Classrooms.org at 1-2; Comments of National Hispanic Media Coalition at 2-4; Comments of NACEPF, the "North American Catholic Educational Programming Foundation, Inc." at 5, 6, 8, 9, 13; Comments of Education-Information Technology (Joshua Lewis, Director) at 1; Comments of Jeffrey Jennings at 2; Comments of Iowa Department of Education at 6, 7, 16; Comments of Hispanic Information and Telecommunications Network, Inc. at 3-5; Comments of Dallas Independent School District (Gary Shuman) at 1; Comments of Frank Barnes; Comments of Elliot Soloway; Comments of Education Coalition at 6, 11, 26-29; Comments of Connected Nation at iii, 6-7, 13-15; Comments of Competitive Carriers Association at 7-11; Comments of Colorado Association

teachers and administrators to educational content providers, technology developers, and service providers to prominent professors of education technology at America’s leading universities, all understand that 21<sup>st</sup> century education programs require students to have broadband Internet access outside of the classroom. Like the FCC, they also recognize that today’s successful learner has in the palm of her hand at all times a mobile learning device that allows her to pull up information on homework and other longer term assignments, communicate with classmates and with teachers, complete projects, learn more about subjects of interest, and work on additional homework problems as needed to fully understand a new subject.<sup>10</sup>

Accordingly, the Lifeline Program should provide mobile broadband support to students from low-income families.

---

of Leaders in Educational Technology at 3; Comments of CollaborationSource; Comments of CTIA-The Wireless Association; Comments of Kentucky Department for Libraries and Archives at 7; Comments of Stanford University Graduate School of Education; Comments of Rethink Education; Comments of Poway Unified School District; Comments of Dean Ryan and Prof. Dede - Harvard Graduate School of Education; Comments of BrightBytes; Comments of Kajeet, Inc.; Comments of Carnegie Library of Pittsburgh at 5-6; Comments of AdTec, Inc. at 3; Comments of ACT Inc. (Thomas A. Lindsley) at 2-3; Comments of Talladega County Schools; Comments of San Diego County Office of Education; Comments of Dothan City Schools (Mark Williams); Comments of Los Angeles Unified School District at 9-10; Comments of Heartland Educational Consortium; Comments of School Board of Polk County, FL (Hazel Sellers, Board Chair); Comments of John S. and James L. Knight Foundation (Eric Newton); Comments of Pullman Public School; Comments of Nancy Tom, Harlandale ISD; Comments of Visions In Education, K-12 Charter School (“Tom Tafoya”); Comments of Scranton Public Library at 2; Comments of Katy Independent School District (Fran McTigrit); Comments of The School District of Osceola County, Florida, Professional and Technical High School (K M Pruitt); Comments of Fairfield Public Schools (Dr. David G. Title); Comments of Appalachia Intermediate Unit 8 at 2; Comments of Fairfax County Public Schools at 2-3. *See also* Reply Comments of Alliance for Excellent Education; Reply Comments of Education Coalition; Joint Center for Political and Economic Studies Ex Parte Letter (Aug. 1, 2013).

<sup>10</sup> *See, e.g., Second FNPRM at ¶ 20.*

**B. Any FCC Minimum Service Standards Must Allow For Mobile Broadband Use**

The Commission should ensure that any minimum service standards it adopts for the Lifeline Program do not shut the door on the substantial number of low income consumers who want to use mobile broadband. FCC adoption of Lifeline performance standards that do not account for the capabilities of today's mobile broadband networks will impede the ability of low-income consumers to access the mobile services they demonstrably prefer.<sup>11</sup>

The FCC can and should address this concern by establishing minimum performance standards at levels that encourage as many providers to participate as is reasonably possible — particularly in light of the high level of adoption of mobile connectivity solutions by low-income consumers.

---

<sup>11</sup> See *Second FNPRM* at ¶¶ 44-46.

## CONCLUSION

The FCC should take all appropriate steps to ensure that the Lifeline Program reflects the realities of the 21st Century communications marketplace and upgrade the Program to support mobile broadband connectivity so low-income students have ready access to 24/7 learning opportunities like their classmates who take advantage of anywhere/anytime broadband access to enhance their education. Lifeline support of mobile broadband connectivity also will provide low-income families access to the benefits of telemedicine and online job application portals that more and more U.S. employers are requiring all job seekers to use. These core examples demonstrate that broadband “is necessary for even basic participation in our society and economy,” and Qualcomm encourages the FCC to incorporate mobile broadband access into the Lifeline Program as soon as possible.

Respectfully submitted,

QUALCOMM INCORPORATED

By: 

---

Dean R. Brenner  
Senior Vice President, Government Affairs

John W. Kuzin  
Senior Director, Regulatory

1730 Pennsylvania Avenue, NW  
Suite 850  
Washington, DC 20006  
202.263.0020

*Attorneys for QUALCOMM Incorporated*

August 31, 2015