June 9, 2015

To Members of the Broadband Opportunity Council:

Thank you for the opportunity to provide my comments in response to the RUS and NTIA's "Broadband Opportunity Council Notice and Request for Comment" [Docket No. 1540414365–5365–01]. In this letter, I suggest ways the federal government can increase broadband availability and consider additional research that I believe is urgently needed to gain a deeper understanding of the broadband challenges and opportunities for vulnerable communities.

As an academic researcher in the field of library and information science, with several years of experience studying and publishing research on broadband adoption and digital inclusion issues,[1][2] I have witnessed the overwhelming need in low-income communities for both high-speed Internet access and digital literacy training, often provided by libraries and community-based organizations. In addition, I have seen the positive social and economic impacts that broadband can have in vulnerable communities. In this letter, I would like to respond to question F23 in the Federal Register dated April 29, 2015: *"How can the federal government make broadband technologies more available and relevant for vulnerable communities?"*

To answer this question, I begin by summarizing the problem. I then introduce my current research, which I believe is both timely and relevant to the BOC's efforts. More concretely, the research seeks to address the need to understand how existing low-cost Internet and digital literacy training programs can provide much needed data and outcomes-based measures to assist the federal government, as well as other digital inclusion stakeholders, in making broadband technologies more available and relevant for vulnerable communities. I conclude with a brief discussion of the expected outputs and outcomes of the research detailed below. My hope is that the information contained in this letter will provide a starting point to assist the Executive Branch in addressing the challenges and opportunities of promoting broadband availability and use in vulnerable communities moving forward.

Statement of the Problem

- Low-income people face significant barriers to broadband adoption. Only 54% of people with an annual income of less than $30,000 subscribe to broadband Internet service at home.[3] The barriers to broadband adoption have been well documented.

- However, further research is needed to more fully understand the factors that influence the effectiveness and ineffectiveness of broadband adoption programs that offer both low-cost Internet and digital literacy programs together for vulnerable populations.

- The FCC's recent Staff Report[4] and John Horrigan's evaluation of Comcast's Internet Essentials program [5] are useful starting points for understanding the

need for low-cost Internet and digital literacy programs. Additional qualitative research and analysis is needed to describe the everyday challenges and opportunities among vulnerable populations as they participate in broadband adoption programs. Additional research can also help to guide the development of outcomes-based measures and goals for such programs, as recently recommended by the GAO.[6]

- As the Broadband Opportunity Council seeks public input to better understand how to increase access to broadband at home in vulnerable communities, additional research on existing low-cost Internet and digital literacy programs can assist members of the Executive Branch in making decisions about how best to promote sustainable broadband adoption. I have recently started this research, which I will now turn to below.

Research Design

My research seeks to respond to this gap in the academic literature by addressing the following questions:

- *What are the key characteristics of an effective partnership between an Internet service provider (ISP) and a digital literacy training organization working together to promote sustainable broadband adoption in low-income communities?*

- *What are the key characteristics of a low-cost Internet & digital literacy training program for vulnerable populations that includes outcomes-based measures and goals? What are the factors that broadband adoption programs use to identify success?*

To answer these questions, I am leading a qualitative study using ethnographic methods (i.e., observation, interviews, and documents) at research sites in vulnerable urban and rural communities across the U.S. The sites were selected to represent those that offer both low-cost Internet (wired and wireless) and a variety of digital literacy training programs for vulnerable populations, including tribal communities, public housing residents, seniors, and veterans. Interviews and focus groups with program participants, staff, and other digital inclusion stakeholders will be included in the study to highlight the everyday experiences of participants in broadband adoption programs. Observations of classes and open hours at each location will also be documented to provide a variety of broadband adoption approaches, including both the technical (hardware, software, etc.) and social (instructors, managers, etc.) aspects of the programs. Outreach materials as well as documentation used to recruit, train, and evaluate participants will also be reviewed.

Expected Outcomes

The outputs from the study will include a final report produced this September that will provide outcomes-based measures and goals for broadband adoption programs in vulnerable communities. This model will be respectful of the unique social, cultural, and historical aspects of each community, while attempting to generalize the findings to other areas of the country. The report will also build on findings from my previous studies of broadband adoption in low-income communities, which have shown why free and low-cost Internet access along with digital literacy training provided by public libraries and community-based organizations is absolutely necessary to promote sustainable broadband adoption in vulnerable communities.

I look forward to sharing the research findings with members of the Broadband Opportunity Council, and I welcome the opportunity to provide additional information that could be helpful to the Executive Branch in the future.

Thank you for considering my comments. A copy of this letter is attached as a PDF below.

Sincerely,

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NOTES

[1] Rhinesmith, C. (2012), "Free Library Hot Spots: Supporting Broadband Adoption in Philadelphia's Low-Income Communities," *International Journal of Communication*, 6, 2529-25.

[2] Whitacre, B. & Rhinesmith, C. (2015), "Public Libraries and Residential Broadband Adoption: Do More Computers Lead to Higher Rates?" *Government Information Quarterly*, *32*(2), 164-171.

[3] Pew Research Center. (2015). "Broadband Technology Fact Sheet." Retrieved from http://www.pewinternet.org/fact-sheets/broadband-technology-fact-sheet/

[4] Federal Communications Commission. (2015) "Low-Income Broadband Pilot Program." Retrieved from https://www.fcc.gov/encyclopedia/low-income-broadband-pilot-program

[5] http://corporate.comcast.com/images/Final_IE_Research_Full_Paper.pdf

[6] http://www.gao.gov/products/GAO-15-473

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I conclude with a brief discussion of the expected outputs and outcomes of the research detailed below. My hope is that the information contained in this letter will provide a starting point to assist the Executive Branch in addressing the challenges and opportunities of promoting broadband availability and use in vulnerable communities moving forward.

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influence the effectiveness and ineffectiveness of broadband adoption programs that offer both low-cost Internet and digital literacy programs together for vulnerable populations.

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[3] Pew Research Center. (2015). "Broadband Technology Fact Sheet." Retrieved from http://www.pewinternet.org/fact-sheets/broadband-technology-fact-sheet/

[4] Federal Communications Commission. (2015) "Low-Income Broadband Pilot Program." Retrieved from https://www.fcc.gov/encyclopedia/low-income-broadband-pilot-program

[5] http://corporate.comcast.com/images/Final_IE_Research_Full_Paper.pdf

[6] http://www.gao.gov/products/GAO-15-473