October 11, 2016

National Telecommunications and Information Administration
U.S. Department of Commerce
1401 Constitution Avenue, N.W.
Washington, D.C. 20230

Re: **National Broadband Research Agenda**

To Whom It May Concern:

The Consortium for School Networking (CoSN) is a professional association for school district technology leaders, serving 13 million students across the United States. The State Educational Technology Directors Association (SETDA) is a membership association launched by state education agency leaders in 2001 to serve, support and represent their emerging interests and needs with respect to the use of technology for teaching, learning, and school operations. We appreciate this opportunity to contribute ideas for furthering the National Broadband Research Agenda (NBRA).

CoSN's and SETDA's members work to provide students and educators with access to the cutting edge technologies and high capacity broadband services required to support teaching and learning. This important work increasingly includes developing innovative strategies for connecting students to broadband when they are off campus. Closing this "Homework Gap" will ensure that many low income, isolated rural, and other students fully realize digital learning's benefits.

Broadband Access and Adoption

We urge the National Telecommunications and Information Administration and the National Science Foundation to prioritize research proposals with direct implications for better ensuring broadband access for the nation's low-income students. For the past fifty years, the primary goal of federal education policy has been to promote educational equity. Today, policies designed to promote educational equity necessarily must include strategies for promoting digital equity for students and their families. Existing federal policies, such as the Universal Service Schools and Libraries program (the "E-rate"), have helped to ensure that millions of additional students have access to broadband at school. Despite this progress, greater innovations and significant new investments are needed to improve school-based broadband connections and out-of-school access to high capacity broadband services.

With this national educational need as context, we urge you to seek and fund research designed to minimize the costs associated with delivering high capacity broadband in low income, rural, and other underserved communities. We also urge a focus on projects designed to maximize the efficient use of spectrum by identifying new opportunities for dramatically expanding access to

unlicensed spectrum, including additional WiFi, which can generate the innovations required to serve high need communities. Finally, we encourage projects focused on further defining the school and home broadband speeds required to ensure all students have access to the rich array of digital materials and tools that can support and enrich teaching and learning.

Socioeconomic Impacts

With regard to specific socioeconomic research areas that can help measure the effectiveness of federal programs seeking to foster broadband access, adoption, or competition, we urge you support projects designed to highlight strategies that will help parents and guardians of un-served households recognize broadband's value for their students. Such work could include comparing student academic, developmental and later career outcomes between students with broadband access only at school and students with more ubiquitous access at home and beyond. This research might also include comparisons of student outcomes when learners use specified devices versus using their preferred device, or comparing outcomes when students are using technology for substitution versus (e.g., simply substituting paper and pencil assessments with tablet based assessment) with an appropriately designed student centric learning environment. We also recommend research designed to identify successful international policies and programs focused on promoting broadband access in low income, rural and other traditionally underserved communities.

Opportunities for Federal Leadership in Data Collection and Research

We encourage you to ensure the National Broadband Research Agenda includes a distinct education pillar with well-defined goals and timelines. The NBRA should include a focus on involving stakeholders with meaningful expertise and experience with broadband delivery for education, including school district, state education agency, and other public education leaders. We also urge you to directly involve the Universal Service Administrative Company (USAC) in the stakeholder involvement process, including identifying ways to promote sharing of USAC's data with researchers, policymakers and others key influencers. As the entity responsible for implementing the E-rate and Lifeline programs, USAC must do a meaningfully better job of collecting and sharing program data, so that participating school systems, researchers, and policymakers can make informed decisions about strategies for strengthening and improving these vital broadband initiatives.

Thank you again for the opportunity to provide input for the NBRA's development. CoSN, SETDA, and our members, would be pleased to support the initiative's continued work.

Sincerely,

Keith Krueger   Tracy Weeks
Chief Executive Officer   Executive Director
CoSN   SETDA