



1000 Oakbrook Drive
Suite 200
Ann Arbor, Michigan 48104-6794

Phone: 734-527-5700
Fax: 734-527-5790
www.merit.edu

July 8, 2011

Ms. Marlene Dortch
Secretary
Federal Communications Commission
445 12th SW
Washington, D.C. 20554

**Re: Connect America Fund - WC Docket No. 10-90
A National Broadband Plan for Our Future – GN Docket No. 09-51
High-Cost Universal Service Support – WC Docket No. 05-337**

Dear Ms. Dortch:

On behalf of our Membership, comprising 359 community anchor institutions in Michigan and elsewhere in the United States, Merit Network respectfully writes in support of the comments submitted in this proceeding by the Schools, Health and Libraries Broadband (SHLB) Coalition to enhance the broadband capabilities of community anchor institutions in rural areas.

Our mission is to be a respected leader in developing and providing advanced networking services to the research and education community. Merit is a trusted source for providing high-quality network infrastructure; initiating and facilitating collaboration; and providing knowledge and technology transfer through outreach.

We have many Members in rural areas of Michigan that have difficulty obtaining affordable, high-capacity broadband connections:

For example, a public school district in Montmorency County (MI) currently pays \$11,400 annually for two T1 leased circuits, totaling 3 Mbps capacity. This cost is only for “throughput,” or the cost to provision the circuit, and does not include the cost for bandwidth. The 3 Mbps capacity is below the school district’s needs. The traffic generated by the public school district and its users has exhausted the capacity of the two circuits.

Another Merit Member, in this instance a private college in Lenawee County (MI), currently pays \$74,222 annually for two T3 leased circuits, totaling 90 Mbps capacity. Again this cost is only for “throughput,” or the cost to provision the circuit, and does not include the cost for bandwidth. The 90 Mbps capacity is below the private college’s needs. The traffic generated by the private college and its users has exhausted capacity of the two circuits.

In most rural areas of Michigan, a lack of “middle mile” or “backhaul” infrastructure for backhaul service limits service performance and affordability for community anchor institutions. In response



1000 Oakbrook Drive
Suite 200
Ann Arbor, Michigan 48104-6794

Phone: 734-527-5700
Fax: 734-527-5790
www.merit.edu

to this problem, Merit Network is constructing a nearly 2,300 mile network extension with help from two grants from the Broadband Technology Opportunities Program (BTOP).

The REACH-3MC project will create “middle mile” or “backhaul” infrastructure in rural communities in areas like Montmorency and Lenawee County. Constructing fiber laterals from this infrastructure to community anchor institutions like the two in our examples creates significant cost savings and increases the total capacity or throughput available to the anchors for future growth.

The public school district in Montmorency County will pay \$2,550 annually for a 1 Gbps fiber lateral connection to the REACH-3MC infrastructure upon the completion of the network build out. The cost is only for “throughput,” and does not include the cost for bandwidth. Down from \$11,400, it creates cost savings of over 400%. Additionally, the capacity available to the school district is increased substantially, from 3 Mbps to 1 Gbps.

The private college in Lenawee County will also pay \$2,550 annually for a 1 Gbps fiber lateral connection to the REACH-3MC infrastructure upon the completion of the network build out. Again, this is the cost for “throughput,” and does not include the cost for bandwidth.¹ Down from \$74,222, it creates tremendous cost savings. Additionally, the capacity available to the private college is increased substantially, from 90 Mbps to 1 Gbps.

Merit has included each of these examples to demonstrate the need for improved connectivity that exists for community anchor institutions in rural areas of Michigan, and to show the benefit of investing in the broadband needs of Michigan anchors.

The current proceeding to reform the High-Cost Fund and to create a new Connect America Fund focused on broadband deployment in rural areas provides an important opportunity for the FCC to ensure that anchor institutions are able to serve the needs of their rural populations. We understand and agree with the desire to build broadband networks to residential consumers in rural areas; however, we respectfully suggest that the needs of community anchor institutions are just as important.

Our Members provide rural consumers with essential services, such as higher education, distance learning, job-training, job search assistance, health records exchange, telemedicine, e-government services, first responder service, remote research and collaboration and more. Our members often need much higher-capacity broadband services than those that are typically provided to residential consumers.

The importance of the services community anchor institutions provide to the public increases dramatically during times of economic hardship. In the recession, community anchors have been

¹ In both examples, the cost for bandwidth per Mbps will remain the same or decrease.



1000 Oakbrook Drive
Suite 200
Ann Arbor, Michigan 48104-6794

Phone: 734-527-5700
Fax: 734-527-5790
www.merit.edu

forced to provide more with smaller budgets. Enhancing the broadband capabilities of community anchor institutions in rural areas will also enable them to consolidate and share resources.

The National Broadband Plan established as a national goal that “every American community should have affordable access to at least 1 gigabit per second broadband service to anchor institutions. . . .” By including financial support to build rural broadband networks that provide affordable, high-capacity broadband to anchor institutions in the new Connect America Fund, the FCC will go a long way toward achieving this goal.

Sincerely,

A handwritten signature in black ink, appearing to read "D. Welch", with a large, sweeping flourish above the name.

Donald J. Welch, Ph.D.
President and CEO
Merit Network, Inc.