

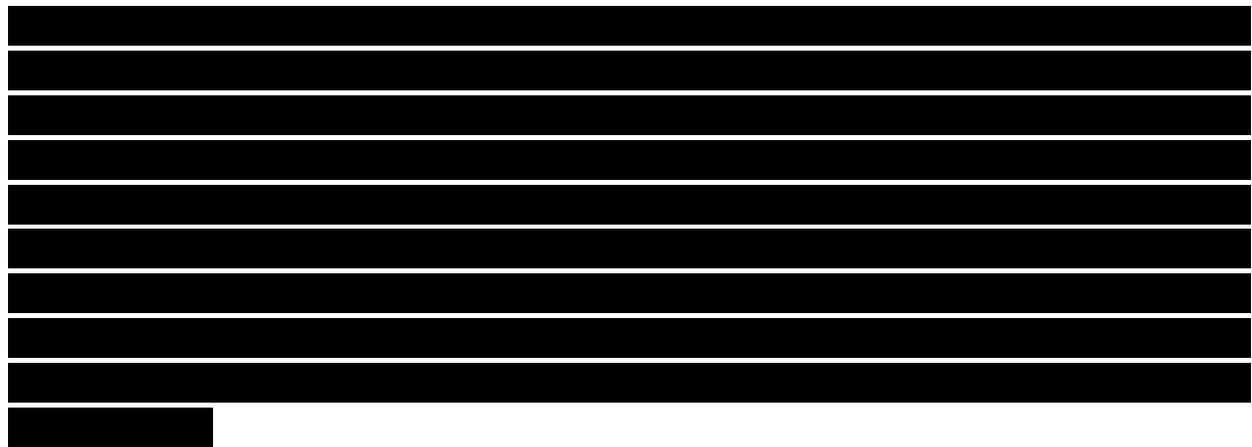


Executive Summary

a. The Opportunity: K12 Education

There is no better use of ARRA funds, or return on the nation’s investment, than broadband for education. The ARRA is very specific on the role this act and its funding should play...”purposes of the program...provide broadband ... access, equipment, and support to—schools..., to facilitate greater use of broadband service by or through these organizations...” (1)

The act and the NOFA also are specific in the need to serve “vulnerable” populations. These populations are primarily those who are unable to take action to gain access to broadband on their own. The K12 student population in each area is the heart of this vulnerable population. Where they are underserved and economically disadvantaged, the call to action is the loudest.



b. A general description of the service area: Poor and Underserved

This application’s focus is Region 17, a West Texas Education Service Center that is covers some of the poorest and least dense areas of the Southwest. This Region’s K12 population of over 36,000, for example, is documented to have a student base of **> 57% economically disadvantaged** (2). As the US states rate, there are only 3 states with higher levels of economically disadvantaged students (3) than Region 17.



c. Number of Households and businesses passed.

There are 55,210 households in Region 17. That number does not include the largest city in the region, Lubbock, as it is served by a separate school district (Lubbock ISD) and is not part of the Region 17 Education Service Center. The area has been excluded in the Service map.

d. Number of community institutions passed or involved with project

This application is focused on the K12 schools within this region.

e. Proposed service and applications: Wide Area Network for 47 schools

This application is to request funding for the design and construction of a broadband WAN for the Region 17 Education Service Center schools. [REDACTED]

[REDACTED] the project will begin to provide connectivity within 120 days of funding and complete within 360 days of funding.

The advantage of a WAN for internet and learning is proven for students. Trillion has demonstrated its expertise in K12 WAN: a Trillion education partner in Nederland, Texas, a graduating class has had a 22 percent increase in math achievement, a 9 percent increase in social studies and a 4 percent increase in English/Language Arts. Students' scores have also increased in reading and science. Texas Education Agency's (TEA) ratings gave Nederland high marks for academic accomplishments following the Trillion WAN implementation(4).

f. Approach to addressing the non-discrimination and interconnection obligations: wholesale options are available. Within the ability of the network, Trillion is willing to open the towers and microwave paths to other carriers. Today Trillion actively markets its towers to other carriers; we would do so in this application as well.

g. Type of broadband system: Ethernet-based hybrid fiber – microwave.

Trillion designs, builds and operates Ethernet-based microwave and hybrid fiber-microwave networks. [REDACTED]

Since these networks are based on Layer 3 switches, ring architecture, and licensed point-to-point spectrum, the reliability of these microwave networks is superior to other designs.

h. Qualifications of the applicant: Broadband to schools is our core business.

Trillion is the leading provider of broadband WAN and VoIP to K12 today, serving over 1000 schools in 24 states.. A 2009 independent customer service survey placed Trillion in the top 3% of all technology companies (5). The criteria for the survey included all elements of the Trillion service: construction, customer contact, network availability and billing. Trillion has earned its position through a focus on education. Similar networks have been built by Trillion in several states. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

j. Expected subscriber projections: Special purpose project.

This application requests Middle-mile Funding for connecting schools to each other and to the Internet. There is no Last-mile connection to a residential population. However, Region 17 is active in supporting Adult Education; Migrant Education; Teacher Development; No Child Left Behind and a host of other community-related programs (6).

As a WAN, VoIP, and Internet Access provider to over 1000 school sites today, Trillion traditionally serves 100% of each student population. The community services offerings from the schools are estimated to add 50% to this population of served individuals. In addition, the availability of a 100Mb/s broadband WAN will increase the quality of many existing programs and enable new programs (such as HD videoconferencing).

[REDACTED]

[REDACTED]

Footnotes

1. American Recovery and Reinvestment Act of 2009
2. Texas Education Agency
3. www.schooldatadirect.org
4. Eschool News; Best Practice Articles; December 2007
5. <http://www.trillion.net/about/CustomSat2009.html>
6. Region 17 website (www.region17.net)