This is the Trillion Partners, Inc. Grant Application to Fund WAN project for Region 17 Education Service Center, Critical Infrastructure Organizations, and Carrier Backhaul provision of wholesale Internet - West Texas. This application would augment the grant awarded to NTS grant as part of the Release NO. 0097.10 a. The Opportunity: Region 17 is the anchor institution, (K-12 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. The Act says the purposes of the program include, to '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 specifically seek to address the need to serve 'vulnerable' populations. These vulnerable populations are those who are unable to take action to gain access to broadband on their own. The K-12 student population in each area is at the core of this vulnerable population. The proposed wide area network (WAN) will deliver major changes to the Region 17 education system. The WAN will enable technology-rich learning environment where educators can improve instructional strategies to increase achievement for all students. As an example, the WAN will enable the delivery of distance learning for K-12 students and evening adult education classes, linking them to best-of-class teachers in the Region and beyond. It reduces costs by removing the need to travel to get to classes and teachers, making education more cost effective for the many families in this region that are disadvantaged. The WAN is designed to transport a variety of other Region 17 based and web-based 21st century applications and services that can transform education in this remote region. The second market to be addressed under this grant application is Critical Infrastructure Organizations. This includes hospitals, emergency services organizations such as Fire and Police, as well as other governmental entities which are within one mile of Trillion's network. The market to be served has 140 of these organizations that are in need of greater bandwidth and these organizations can be served based upon the infrastructure put in place for the anchor institution. According to the Texas Department of Agriculture, 53 of these institutions do not have access to broadband capacity today. These represent institutions beyond the network footprint awarded under the NTS grant as part of the Release NO. 0097.10 and within one mile of Trillion's proposed network. Also, since the middle mile infrastructure that would be put in place including pole/tower facilities in very attractive locations, an offering of wholesale internet access to providers that would offer retail internet service. The use of cellular, Wimax or other technologies would be easily added to the infrastructure put in place. Approximately 46,000s households could be addressed. These would be households beyond the network footprint awarded under the NTS grant as part of the Release
NO. 0097.10 where Trillion’s network would be available for third parties to lease WiMax and other wireless backhaul capacity.

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 covers some of the poorest and least dense areas of the Southwest. This Region's K-12 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. For several years Region 17 has attempted to work with third parties to design, build and utilize a broadband WAN that will enable schools to deliver services and Internet access at a competitive level. Unfortunately, this process has been stopped by economic problems that have affected the public and private parties committed to the delivery of these services. This project will not be funded in this time frame if the ARRA funding is not awarded. Also, there are 140 Critical Infrastructure organizations and 46,000 households that can be served in this same area as the anchor institution of Region 17.

c. Number of Households and businesses passed.

There are approximately 46,000 households in Region 17 which would not be serviced by the NTS grant as part of the Release NO. 0097.10. This 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

The anchor institution being Region 17 consists of 47 school districts, servicing 203 individual school sites or buildings. The areas served by the anchor institution also have 140 of Critical Infrastructure including emergency services organizations within one mile of Trillion's network.

e. Proposed service and applications:

Wide Area Network for 47 schools districts, 140 Critical Infrastructure Organizations, and 46,000 retail internet subscribers. This application is to request funding for the design and construction of a broadband WAN for the Region 17 Education Service Center schools. Trillion requests capital funds of $2,862,039 to build the infrastructure needed to serve 47 of the 61 school districts in this region. With a bid process already complete, and contracts pending, 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 K-12 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). This same infrastructure will allow the network to offer additional bandwidth to the Critical Infrastructure organizations and retail internet providers.

f. Approach to addressing the non-discrimination and interconnection obligations:

As part of this application, Trillion fully expects wholesale provision to retail providers. Today, Trillion already pursues retail providers to utilize its wholesale infrastructure. Trillion would provide interconnection to other providers on a competitively neutral, non-discriminatory basis because it has a financial incentive to increase the revenues derived from the use of its middle mile facilities.

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

Trillion designs, builds and operates Ethernet-based microwave and hybrid fiber-microwave networks. 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 K-12 today,
serving over 1,000 schools in 24 states. A 2009 independent customer service survey placed Trillion in the top 3% of all technology companies for customer satisfaction. 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 and other governmental entities. Similar networks have been built by Trillion in several states. The project is sustainable in that Region-17 has applied for E-rate funding to cover the costs of operating expenses and upgrades for the network. Region 17 is familiar with E-rate and, while the priority one portion of the E-rate program funding does not fund the acquisition of a network, it is used by thousands of schools nationwide to pay for operating costs. Overall cost of the broadband system: $3.6 million. The cost of this project is roughly 34% tower construction - for poles to mount microwave antennas in areas where towers are not available for lease; 35% electronics - for radios and associated switches and hardware. The balance is for labor and services needed to complete the project 'jobs and local services (such as crane rental) that add to the local economy. The grant as part of the Release NO. 0097.10 awarded to NTS may further reduce this capital expenditure forecast to the extent Trillion is able to utilize newly constructed fiber capacity for as many as ten of Trillion's 47 network sites, with the