

Broadband USA Applications Database

Applicant Name: TELISITE Corp.

Project Title: TELISITE: A Web-based Clearinghouse for Rapid and Sustainable Broadband Adoption in Rural America

Project Type: Sustainable Adoption

Executive Summary

Introduction

TELISITE is a revolutionary web portal and education outreach that entices citizens to adopt, embrace, and improve broadband service in completely new ways. Our concept uses public information, public participation, monetary incentives, and the Internet to vastly improve the efficiency of broadband delivery in rural communities, while expanding public knowledge and awareness of broadband. Our approach may be replicated throughout the globe to greatly increase the uptake efficiency, and thus reduce the cost, of broadband adoption in rural communities.

Problem Statement

Despite the vast knowledge that exists on the web today, there is very little known about where broadband infrastructure exists. Fiber cables, towers, and switches connect the global telecommunications grid and form the essential backbone needed to bring broadband to rural areas, but the whereabouts and availability of this valuable infrastructure is kept private by the large companies that own them. Where and how to connect to the backbone network is often a mystery for small broadband providers, who spend a great deal of time, energy, and money trying to find interconnect points of other broadband carriers to build out their local networks. If information about telecommunications infrastructure could be shared, then local and regional broadband providers could plan, deploy, and install their networks much more efficiently than today.

Unfortunately, rural citizens and small business owners are at a great competitive disadvantage because they do not enjoy access to the major fiber optic cable infrastructure and low cost, high bandwidth service of larger metropolitan areas. Education and health care suffer in these underserved areas, and job opportunities are lost. Yet, in many instances, high bandwidth fiber cables or switches may be very close to their neighborhoods, right in plain view!

Local broadband providers today are forced to use a combination of multiple wireless and wired connections (e.g. hops) to connect their own rural customers to the internet backbone of more mature telephone, broadband or cable companies who give them access to infrastructure points often located many tens or hundreds of miles away. Many local providers team together to share towers and use a combination of wireless technology, copper and fiber cables to interconnect with each other in order to connect their customers with the far away backbone, but they do so in a very inefficient manner, because they do not have access to full knowledge of the available infrastructure around them. While today's approach to broadband delivery in rural America works, it would scale so much more easily and rapidly if there was shared knowledge of infrastructure and broadband equipment locations.

Another problem facing rural America is that customers may be illiterate about broadband, not appreciating the value it brings to their daily life, health care, or education. Children growing up in homes and schools with poor or no broadband will be left behind throughout their lifetimes. Rural citizens often do not know how to obtain broadband if the incumbent telephone provider does not offer it. It is clear that families, businesses, schools, and medical centers will increasingly rely on broadband capacity, yet rural Americans live with dial-up internet or slow speed DSL due to the inefficiencies faced by small rural broadband providers who have difficult access to the large broadband networks of the large incumbent Network Service Providers. Laws in the US have continued to make access to the backbone difficult for local providers.

TELISITE as a solution

TELISITE solves all of these problems in dramatic fashion. Consider that today, it is virtually impossible for any customer to actually offer to help its own telecommunications provider -- just think of calling your phone or cable company with an offer to help them improve their service to your own neighborhood -- it is just not possible today. If a customer wants broadband service, they are practically powerless to do much about it in America, and especially in rural America where there are often few competitive providers.

TELISITE taps into citizen participation and uses local knowledge and information in a brand new way to greatly speed broadband adoption and buildout in rural America. Citizens have great awareness of the surroundings of their own neighborhoods or country roads, and can quickly learn how to spot the locations of fiber optic handholds, vacant towers, telephone switching offices, and other important infrastructure. By educating citizens about what to look for, and providing a web portal to report their

observations in their own neighborhoods, citizens will provide valuable information to local broadband carriers wanting to build out service, which has heretofore been extremely difficult to obtain.

TELISITE also improves the broadband landscape by providing a web community that educates citizens in rural America about broadband, and allows them to express their desire for broadband service, while offering to help host any internet service provider's equipment at their home or apartment. TELISITE democratizes broadband access, by allowing citizens to report on their lack of broadband, as well a willingness to help any internet service provider, including smaller ISPs in their community. TELISITE leads to massive efficiencies for broadband providers by building a knowledge base of customers and infrastructure that creates competition and demand for service. It also provides citizens with an opportunity to make money by opening their home by hosting broadband equipment.

In conclusion, TELISITE creates an important new type of knowledge base that is critical to sustaining and improving broadband adoption in rural America. This project will be executed by individuals who are proven leaders, innovators, educators, and entrepreneurs.