Like many rural communities in the U.S., the town of Scottsburg, Indiana has for years been overlooked by large carriers and internet providers who claim that its small population means that they cannot make a viable business case for providing broadband services. The only alternative being expensive leased T1 lines from the incumbent operator that cost a staggering $1,600 per month in Scottsburg, even though in Louisville, Kentucky - just 29 miles away - it cost $600 for an identical service.

But that situation began to change for Scottsburg in 2003 when one of the largest businesses in town - the local Chrysler dealership - approached Scottsburg Mayor Bill Graham to inform him that they were planning to relocate due to the unavailability of affordable broadband access. Claiming that broadband was not only vital to its business, but now mandated from its corporate headquarters, the dealership was one of several local businesses that had contacted Mayor Graham with this complaint. In addition, a local military supplier nearly lost a million-dollar contract because it couldn’t e-mail a proposal on time. And joining the chorus were a host of residents with home offices and telecommuters from neighboring big cities. Naturally, Mayor Graham began to worry seriously about the economic viability and future of his town.

In numerous appeals to major cable and phone companies to provide high-speed services to Scottsburg, Mayor Graham repeatedly received the same answer — that a broadband network could not be built affordably for such a small town. So he approached network consultants who recommended that Scottsburg build its own fiber network.

But at a cost of about $6M with major civic disruptions and taking several years to complete, this was not a practical alternative.

Then he heard about Owensboro, Kentucky, a city with a population of 60,000 only a few hours drive away that once faced the same problem. During a visit to Owensboro, Mayor Graham learned about their successful wireless broadband deployment and knew just what he needed to do. He was even surprised to find out that a wireless broadband network could be built for only a fraction of the cost, approximately 3%, of a city-wide fiber network.
Scottsburg’s Wireless Network

After a brief design phase and RFP, Scottsburg decided to use equipment from Alvarion. Within four months of Mayor Graham’s visit to Owensboro, the network was up and running with the first customer connected. Distributed throughout town, Alvarion base stations now have complete city-wide coverage providing broadband access to residents, businesses, schools and even government offices. Equipment from Alvarion’s BreezeACCESS VL product suite uses the unlicensed 5.8 GHz spectrum to provide high bandwidth to schools. BreezeAccess II equipment uses the 2.4 GHz spectrum to provide high speed internet to residences, small businesses in town and government offices in and around Scott county.

In addition with the BreezeACCESS SU-M, the network supports mobile broadband for the city police department giving officers access to important crime databases and the ability to send and receive reports and updates while remaining in the field.

The result is that officers have gained approximately two hours of productivity per day further cementing the economic value of widespread broadband in Scottsburg. Scottsburg has also started to use Alvarion’s BreezeACCESS 900 product which operates in non-line-of-sight conditions to provide broadband services to select rural areas where there are concentrations of customers that are unable to use 2.4 GHz due to trees and other foliage.

The total cost to build the city-wide network was only $385,000, a figure that includes all systems and software. The result is broadband everywhere at affordable prices, meaning that businesses that need broadband can get it, and sometimes even save money, too. For example, school officials estimate that they are saving approximately $16,000 per month.

The role of the network as a lifeline for Scottsburg’s economy has been recognized at two international award ceremonies. In October 2005 at the annual Wireless Communities Best Practices Awards held by the Wireless Internet Institute (W2i), Scottsburg was named best ‘Local Municipal Initiative’. And at The Wireless Broadband Innovation Awards ceremony, held in May 2006, Scottsburg was recognized as the ‘Best Municipal Wireless Deployment’ in the world.

The Future

Scottsburg is now planning to expand its network to wirelessly connect security cameras and public safety vehicles using Alvarion’s BreezeACCESS 900. With wireless the only way for Scottsburg to obtain affordable broadband, due to the foresight of town leaders and advanced technology from Alvarion, this town seized control of its own broadband destiny - and came out on top.