



Wireless Networking Enhances Brighton, Colorado.

Background

The City of Brighton, CO Police Department was in need of a replacement mobile wireless solution to accommodate the data communication needs of the local police force. The system would be required to provide data services to patrol cars within the operational boundaries. High capacity throughput and scalability for growth were other requirements to be met. The current system was a public service that didn't provide full coverage and when the service was available, data speeds were slow causing wait times to access public safety systems.

Solution

The City of Brighton turned to Twin Eagle Consulting for a solution that is a Full Service Partner of Microwave Data Systems. During initial discussions it was realized that the City had more needs than mobile data to include enhancements in the Wide Area Network, Water/Waste Water SCADA and communication and control to a new early warning system. Twin Eagle Consulting proposed a solution to integrate all communication systems using current infrastructure and new wireless technology. Working closely with Brighton's own network engineers, a converged network formed using current leased line, FHSS 900Mhz and 5.8Ghz solutions. Twin Eagle Consulting also worked closely with Brighton Police Departments 911 dispatch outsourcer (Adcom 911) to improve connectivity between the dispatch center and Brighton. This solution provided additional connectivity for future 700Mhz interoperability systems and transport paths for mobile applications, security, compression and redundant early warning system hosts.

In the deployment of Brighton's new converged network, the City now has a 12Mbps backbone that connects major communication centers to each other and a 50Mbps backbone to Adcom 911. This network provides connectivity to all water and waste water systems improving the City's management of resources. The early warning system can be monitored or triggered from any mobile vehicle, office or dispatch center. Improving connectivity and reducing cost was not the only advantage of this new converged network. System management is now available to business leaders and network administrators from the office to every water well, mobile vehicle, waste system and other serial or IP end-points.

