

AFL Designs and Installs Wireless Network to Provide News to PATH Train Passengers

Summary

AFL designed and installed a wireless system plus provided advanced technology and network management services for PATH Transit Systems. The wireless network is used for communication to the train cars from the platforms at several locations in New York City and New Jersey.

Challenge

PATH (Port Authority Trans-Hudson) is a rapid transit railroad that links Manhattan and New York City with Newark, Harrison, Hoboken and Jersey City in northern New Jersey. PATH needed a wireless network capable of high speed communication between five platforms and two train yards back to a central location along 14 miles of track.



Nodes (installed to the right of the monitor above) at the World Trade Center platform in New York receive information and download to monitors inside the trains.



AFL installs nodes on tower at South Street Yard in New Jersey.

Solution

AFL designed a wireless system that linked data from MSNBC to monitors inside more than 300 PATH train cars and at train stations. The design plan utilized existing fiber optic cable to connect nodes to a central point. AFL installed 37 wireless nodes, some cabled in and others on wireless back hauls, at PATH platforms. These nodes enable round-the-clock updates and real-time data, such as weather and news, to be downloaded once the train arrives at the platform. Additionally, nodes were installed on towers in two train yards where trains are parked during off-peak hours. These locations were then connected to a central location via fiber. AFL also provides maintenance service to ensure the system runs to spec.

Results

PATH now leverages technology to meet the connectivity and information needs of their passengers. The wireless digital transmission system between the operation control center and the trains informs PATH passengers about the current situation of their travel including expected time of arrival, delays, connections and traffic conditions. AFL's system provided bandwidth throughput, scalability and reliability that ensures PATH has minimal issues with the system.

