



Strategic Technology Communications

Agua Fria Union High School District, Avondale, AZ

Agua Fria Union High School District, located in Avondale, AZ, consists of four high schools servicing over 6,000 students and nearly 200 teachers and support staff; plans to add a fifth high school are in progress. The District needed to augment network capacity to handle the expected increase in traffic from newly installed web-based student management software. This software enables teachers and administrators across the district access to record attendance and grades in real time.



The District contacted Strategic Technology Communications (STC) for assistance. STC provides private infrastructures and services that enable high-speed broadband Internet connectivity, data, voice, and video communications.

The original network infrastructure consisted of three T1 lines per site. Additional T1 lines were considered, however, this option was inadequate to meet the necessary bandwidth requirements. Consideration was also given to deploying fiber to each facility to increase capacity but the cost, an estimated \$500K for the project, and the delays associated with a lengthy construction process made fiber an impractical solution.

After further review, STC determined that BridgeWave's AR80X and GE80 gigabit Ethernet wireless systems would satisfy the District's network needs. In addition to the full rate, full duplex performance, the AR80X with exclusive AdaptRate™ technology can momentarily switch transmissions from gigabit Ethernet to 100 Mbps data rates during inclement weather to maintain a highly available link.

CHALLENGES:

- Deliver reliable, high-speed connectivity to support campus expansion and the implementation of new student management system
- Replace various T1 lines that could not handle the deluge of data traffic

BRIDGEWAVE SOLUTION:

- GE80 and AR80X, 80 GHz AdaptRate links

BENEFITS:

- Set up in days to meet tight deadline
- Consolidate to centralized server environment for substantial cost and operational efficiencies
- Additional bandwidth allows for the implementation of new IT initiatives, including a Help Desk



"Once installed, we received positive comments from students and teachers on the marked improvement in network performance."

*- Phil Denette,
Technology Director
Agua Fria Union High School District*