

Houston County Board of Education Enhances Learning Through Wireless Technologies



“The education system is moving toward cloud-based collaboration, so to maximize efficiency in the classroom, we knew that a reliable wireless network was imperative.”

SHARON LUNCEFORD,
DIRECTOR OF INFORMATION TECHNOLOGY,
HOUSTON COUNTY BOARD OF
EDUCATION



The Challenge

LOCATED IN THE HEART OF GEORGIA, the Houston County School System educates approximately 28,000 K-12 students on 38 campuses. As part of an ongoing mobility initiative, the school district sought a strong wireless network in order to implement new cloud-based collaboration and learning management systems.

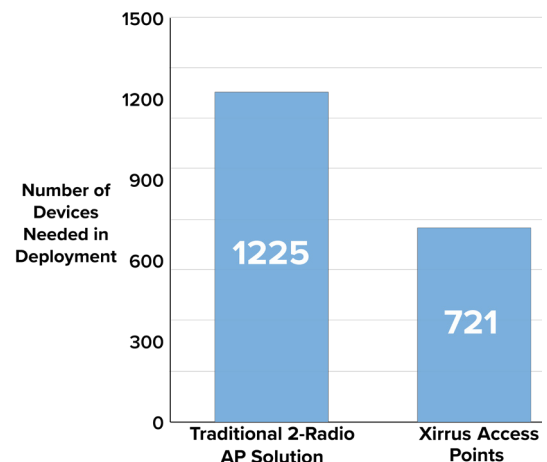
To achieve its vision of building a world-class infrastructure for education, the Houston County Board of Education first had to streamline their network to ensure optimal performance across all campuses at all times. With many schools employing a mix of wireless devices from multiple vendors, the network was unable to scale to meet the requirements of the district's new technology initiatives.

Making matters more difficult, the county's Bring Your Own Device (BYOD) initiative, a deadline project to support at least one wireless-enabled device per student in the classroom, was falling behind due to this network's inefficiency. This prompted the school board to seek out a Wi-Fi provider that would guarantee a scalable network and robust wireless services.

The Solution

HOUSTON COUNTY IT OFFICIALS DEPLOYED 721 Xirrus high-density access points (AP) with more than 2,550 radios throughout the district. In addition, the on-premises Xirrus Management System (XMS), a wireless network management platform, was installed to provide full monitoring and control of the Xirrus wireless network. They implemented a multi-layered security strategy to secure network access to the Internet with SonicWALL firewalls, allowing only authenticated access and securing the devices using the AirWatch enterprise mobility management solution.

Houston County schools also received a guest network that specifically provided internet access for BYOD users. No device on the guest network is allowed access to the secure school network, which houses critical administrative data.



The Results

HOUSTON SCHOOLS RECEIVED SEAMLESS AND RELIABLE ACCESS to 30+ high-bandwidth devices, one wireless device per student, for each classroom. The future-proofed Wi-Fi network will scale as students bring more devices into the classroom and as schools expand. Schools are now able to automatically push class content, curriculum and applications to ensure the proper educational materials are on a device.



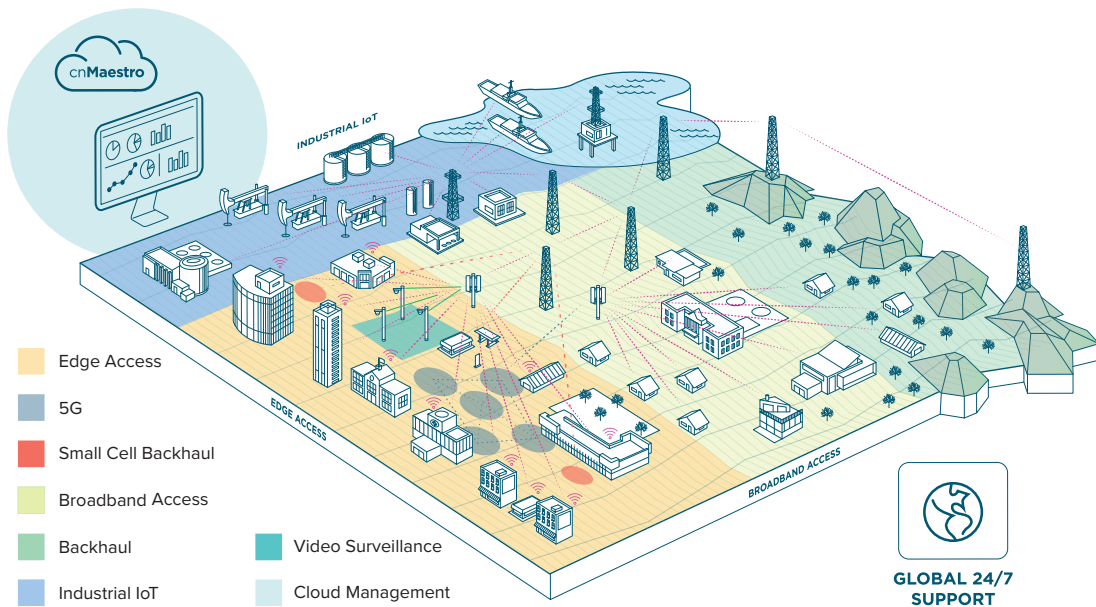
Lower total cost of ownership by deploying 504 fewer devices



Flexibility to update to 802.11ac technology with modular architecture



Seamless and reliable access to 30+ high-bandwidth devices per classroom



Cambium Networks' Gigabit wireless solutions enable municipal, enterprise and service provider operators to tailor connectivity to meet exact requirements and grow as needs evolve.

Next Steps

XIRRUS WI-FI APS PROVIDE THE ABILITY TO SCALE, UPGRADE AND SIMPLIFY network management that the Houston County School District required to meet the needs of students for many years to come. Additionally, software programmable radios can be switched from 2.4 GHz to 5 GHz when needed as newer devices are deployed. The ability to scale, upgrade and easily manage mobile devices enabled Houston County School Board to roll out their BYOD program as planned. Since initial deployment, the Houston County Board of Education has converted from an on-premises XMS to a cloud-based XMS.