Maximizing IT Budget with Futureproof Wireless Network

Technology Needs

- Provide a reliable and secure wireless network for students and staff
- Enable mobile learning and remote access to educational resources
- Manage network infrastructure with limited resources and budget

Extreme Solution Components

- Extreme Wireless™
- ExtremeCloud™ IQ

"Once we installed the APs, I started getting Wi-Fi 6 here in my office. I did a speed test and I was doubling or tripling what we were getting before. And that's going to make a difference, students will have better connectivity throughout the school."

Christopher Escarsega, Network Administrator, Tornillo ISD

"ExtremeCloud IQ is a major tool we can use to see the devices on the wireless and understand what they're trying to access. We're seeing where all the bandwidth is going and understand what the students are trying to access, what we need to block, and what devices are trying to get on the network - especially outside devices that we don't want on our network."

Christopher Escarsega

"It was a challenge because the teachers want the students to have their devices all the time, and it puts a strain on the Wi-Fi. And it's not just student devices, but teacher devices, smart displays and TVs, and applications, all hitting the network. So on the IT side, we had to figure out what is important and what needs priority."

Christopher Escarsega

The Tornillo Independent School District is a small district in West Texas comprising four schools, 825 students and roughly 200 faculty members. The district is responsible for an elementary, intermediate, junior, and high school, sourcing students from the town of Tornillo and the surrounding rural areas.

Tornillo ISD was faced with several challenges in providing a secure, reliable wireless network to its students and teachers. The district's small IT team needed to be able to deploy a network infrastructure that could keep up with the ever-increasing demand for Wi-Fi connectivity in academic settings. Providing reliable, high-speed wireless access to support mobile learning and remote access to educational resources for both students and faculty was a top priority.

When COVID hit, the district quickly provided devices to every student from grades 3 through 12. But, as students returned to the classroom, the rush of those new devices on the pre-existing, outdated network created new challenges for Tornillo's IT team. Not only did the district need to increase bandwidth to support the changing classroom environment, but it also needed to improve security and ensure new digital learning tools weren't syphoning bandwidth from critical needs like online testing.

"It was a challenge because the teachers want the students to have their devices all the time, and it puts a strain on the Wi-Fi. And it's not just student devices, but teacher devices, smart displays and TVs, and applications all hitting the network. So, on the IT side, we had to figure out what is important and what needs priority," said Christopher Escarsega, Network Administrator, Tornillo ISD.

To address all these challenges, Tornillo ISD chose Extreme Networks to provide its new wireless network infrastructure. Extreme Networks' Wi-Fi access points were installed throughout the district to provide reliable, high-speed wireless access to students and staff. Coupled with ExtremeCloud IQ, the district was enabled to simplify network management and remote troubleshooting through a single platform.

Following the Extreme cloud network deployment, Tornillo schools experienced notable improvements: the new APs provided better signal strength, allowing students to have a stronger connection and a higher refresh rate, and connectivity speeds increased, which meant that students could access the online learning materials quickly without sacrificing class time.

Results

✓ Reliable and Secure Wireless Network

- With Extreme Networks' Wi-Fi access points and switches, the Tornillo ISD was able to provide its students and staff with reliable, high-speed wireless access to support mobile learning and remote access to educational resources.
- Extreme Networks' solutions also provided the district with the security features it needed to protect its network from unauthorized access and cyber threats.

👤 Simplified Network Management

- ExtremeCloud IQ enabled the district's IT team to manage its network infrastructure from a single pane of glass, simplifying network management and reducing burden on IT staff.
- The district's IT team was also able to remotely troubleshoot network issues, minimizing downtime and ensuring that students and staff always had access to the resources they needed.

💲 Affordable and Scalable Solution

- Extreme Networks' solutions were affordable and scalable, enabling the Tornillo Independent School District to expand its wireless network infrastructure as needed to meet the ever-increasing demand for Wi-Fi connectivity.