

Columbia Gorge Education Service District

Bridging the Digital Divide for Rural Schools

The Columbia Gorge Education Service District (CGESD) is dedicated to enhancing educational opportunities for four rural school districts — some of the most remote in Oregon. But with schools scattered throughout Mt. Hood National Forest and the Columbia Gorge, the organization wasn't able to complete its equitable mission for all students. The reason? Lack of broadband reliability. In places like Maupin, Oregon, if two people were streaming a video, a classroom of 30 wouldn't have the bandwidth to take a state-mandated test.



“The equity model that we’re trying to make possible is one where a student’s education and access to resources isn’t jeopardized based on their location,” said CGESD Technology Director Cody Harmon. “Now that everything from state testing to classroom work is digital, it’s crucial for school districts not to worry about network reliability and bandwidth limitations.”



“More than ever, schools need quick, reliable internet so students can access online tools to learn,” said Bryan Adams, Director of Sales and Marketing at LS Networks. “This need for bandwidth and connectivity has skyrocketed across Oregon, in both urban and rural areas.” LS Networks was a longtime internet service provider for CGESD, partnering with the Cascade Technology Alliance to receive technology solutions through a regional consortium. While LS Networks provided the backbone connectivity for CGESD, two rural districts in Dufur and South Wasco were too far out to receive reliable connectivity.

“These rural districts were operating on T1 and microwave internet for years,” said Harmon. “But those services don’t have the bandwidth when you need to test 30–50 kids all online at the same time. When we had the opportunity to build fiber, we jumped.”

Funding Through the Federal E-Rate Program

Like many rural districts, CGESD sought federal funding to make their fiber connectivity a reality. The organization applied and received funds through the Federal E-Rate Program. Funding is offered through the Universal Service Administrative Company's (USAC) Schools and Libraries — under the direction of the Federal Communications Commission (FCC) — which assists U.S. schools and libraries to obtain affordable internet access and telecommunications services. With help from these funds, CGESD needed a telecom provider that could not only provide 1-gigabit services, but could actually build fiber to these remote regions.

LS Networks offered that solution and began construction of a customized fiber network in 2016. As the third-largest funding recipient in the Pacific Northwest of the E-Rate Program, LS Networks services schools and districts outside the Portland and Seattle metros. In total, LS Networks supports 62 Northwest school districts, providing broadband access to approximately 290,000 students. "It was a herculean effort on part of LS Networks to build the infrastructure we needed," said Harmon. "They really are the only one in the region offering that level of network customization. We are talking about a level of connectivity that is unprecedented for a community of that size."

"When we sat down with telecom providers to discuss how to make this happen, the response was always, 'we don't offer that service in that region, but here's what we can do,'" said Harmon. "The solution was always using old technology to fill the gaps, but that's not what we were looking for. We needed a true fiber solution."



Equitable Access to Technology

CGESD now offers rural 1A school districts the same caliber of broadband as 5A school districts located right off the main network infrastructure. Rural schools like those in Dufur, Oregon, can now participate in robotics programs, use Chromebooks in the classroom, and access the internet quickly for state testing, research and more.

"We are excited to offer rural schools and districts the bandwidth needed to connect students with the online tools they need to succeed," said Adams.

"It's a huge paradigm shift in terms of supporting our education mission and state testing requirements," said Harmon. "LS Networks has a reputation for extreme reliability and steadfast service offering. For our teachers and students this translates to more access and resources in the classroom."