

CASE STUDY / K-12 SCHOOL DISTRICT / COLORADO

A Wireless *Overhaul* From a Trusted Partner

How the highest-elevation school district in America rebuilt its wireless network, one week into a new IT director's job.

10,500_{ft} Highest-elevation school district in America

AT A GLANCE

CLIENT

Lake County School District

LOCATION

Leadville, Colorado

INDUSTRY

K-12 Public Schools

SERVICES

Wireless Infrastructure ·
Office 365 Migration ·
Endpoints · Securly

PARTNER

RUCKUS Networks

HEADLINE RESULT

Reliable WiFi at 10,500 ft

01 THE CLIENT

Four schools, *two* miles up

Lake County School District sits in Leadville, high in the mountains of central Colorado, at 10,500 feet. It is the highest-elevation school district in America, serving roughly 1,200 users across four schools.

Twelve hundred users across four buildings is not a large network by city standards, but it carries everything: instruction, testing, attendance, food service, and the phones. There is no second network to fall back on when one building drops.

Altitude is not a novelty detail here. It shapes the weather, the construction, the seasons, and the very ordinary business of keeping four buildings reliably connected in a place where geography does not cooperate and the nearest specialist is not close.

The district needed its network to be the one thing that did not require improvisation.

02 THE CHALLENGE

A week into the job, the *whole* district to cover

DJ Nephew had been the district's IT director for about a week when he was handed the project: a full district-wide WiFi overhaul, funded through E-Rate and awarded by competitive bid.

The wireless network he inherited was seven years old and showed it. Dead zones had become part of the building's folklore, the sort of thing staff and students quietly route around rather than report. The E-Rate process added its own weight: the bid had to be run correctly, and the choice had to be defensible on paper as well as in the hallways.

E-Rate money also arrives on a calendar. Filing windows open and close on federal dates, and a missed deadline does not slip a quarter, it slips a year.

WHERE HE STARTED

Going into the bid, Nephew was leaning toward Ubiquiti. It was the option he knew, and on a spreadsheet it made sense.

03 FINDING THE RIGHT PARTNER

Leaning one way, then *meeting* Pine Cove

Nephew came out of the bid choosing RUCKUS instead. The reason had as much to do with the team standing behind the hardware as with the hardware itself.

“

The Pine Cove team is fantastic. The WiFi is fantastic. They deliver on their promises. Pine Cove subtracts from my workload, unlike other vendors.

DJ NEPHEW · IT DIRECTOR, LAKE COUNTY SCHOOL DISTRICT

04 WHAT CHANGED

New wireless, installed *together*

Pine Cove built a completely new wireless infrastructure alongside the district's own team, working through COVID-19 distancing requirements on site.

01 Dead zones mapped, then eliminated

Surveyed building by building, so the new design solved the actual gaps rather than the assumed ones.

02 A completely new RUCKUS network

New wireless infrastructure across all four schools, specified to carry 1,200 users without the workarounds.

03 Installed hand in hand with district staff

Pine Cove worked shoulder to shoulder with Nephew's team through COVID-19 distancing, which left the district's own people knowing the network.

04 Endpoints and power

Chromebooks, laptops, and a UPS supplied alongside the network, so the refresh reached the devices in students' hands.

05 Securly and Office 365

Student safety filtering added, and the district migrated to Office 365.

05

THE RESULTS

Coverage that reaches *everywhere***1,200**

users across four schools on
new RUCKUS wireless

7-Year

old network fully replaced, top
to bottom

0

dead zones left after mapping
and remediation

The workarounds went away with the dead zones. Staff stopped knowing which corner of which building not to stand in, and the district got a network that behaves the same on the fourth floor as it does in the front office.

For a one-person IT department at 10,500 feet, the more durable result is the one Nephew names himself: the project subtracted from his workload instead of adding to it.

06

LOOKING AHEAD

Steady ground at *altitude*

With wireless, endpoints, filtering, and Office 365 settled, the district is working from a stable base for the first time in years. The next conversations are about what to build on top of it, rather than what to hold together.

Ready to *chat*?

Let's talk about what your organization is trying to accomplish, before we talk about products.

[Schedule Your Free IT Assessment](#)

CALL

800.432.0346

EMAIL

sales@pinecc.com

WEB

pinecc.com