



Powering LA County Fire Stations with Mission-Critical Network Infrastructure

Reliable Connectivity for Life-Saving Emergency Response

Case Study



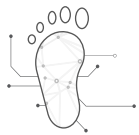
THE CLIENT

The Los Angeles County Fire Department (LACoFD) operates numerous fire stations across Los Angeles County and neighboring areas, providing vital emergency response and life safety services to diverse communities in the region.



INDUSTRY

Public Safety and Emergency Services



FOOTPRINT

LACoFD serves 60 incorporated cities, including 59 within Los Angeles County and one in Orange County, and even covers unincorporated areas and a broad geographic area through its fire stations.



OPERATIONAL OVERVIEW

SUPPORT CHANNELS: Emergency Dispatch Services, Fire Station Operations, Equipment Maintenance

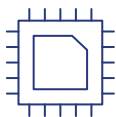
OPERATIONS: Emergency Medical Services, Fire Suppression, Rescue Operations, Community Safety Outreach, Inter-agency Coordination



CHALLENGES

Our client struggled with low-quality network infrastructure across their fire stations, resulting in specific challenges.

- Lack of RF design and architectural drawings hampered optimal wireless AP placement.
- Unknown building materials prevented ensuring consistent wireless coverage and bandwidth.



Coverage Gaps

Missing RF design and facility data caused unreliable wireless signals and blind spots.



Structural Barriers

Building materials and station layouts limit uniform wireless connectivity.



Operational Sensitivity

Network upgrades had to be scheduled to avoid interrupting essential emergency services.

SOLUTION

Our team planned a minimally disruptive network deployment strategy and executed it with utmost perfection:

- Conducted onsite design assessments of 23 fire stations for optimal AP placement and coverage gap resolution.
- Integrated indoor/outdoor wireless APs, high-throughput backhaul, switching, and security systems.
- Installed Cat6 cabling infrastructure, ensuring scalability and easy deployment.



Detailed Network Design

Site surveys enabled strategic equipment placement to eliminate coverage blind spots.



Equipment Deployment

Use of Ruckus APs, Siklu wireless backhaul units, switches, and secure firewalls improved performance.

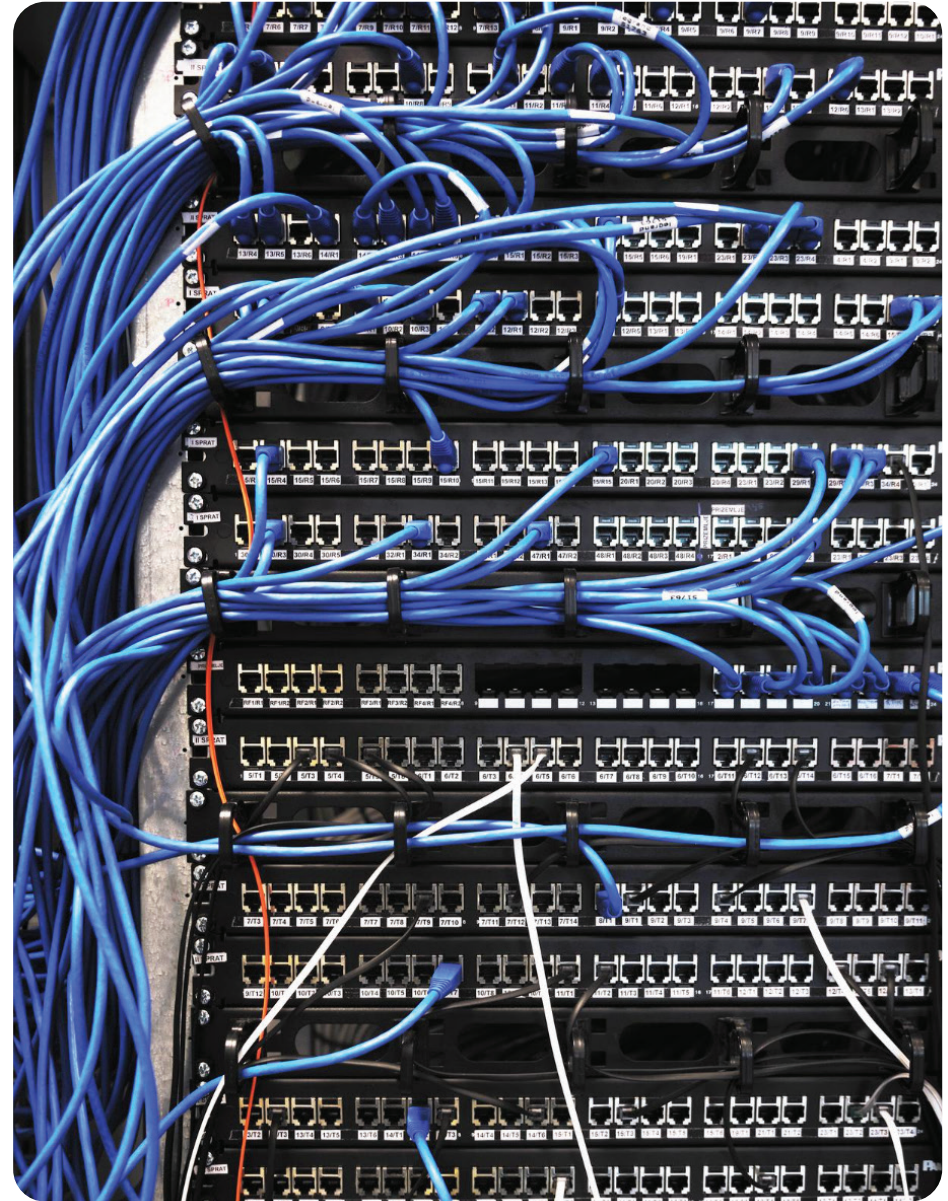


Disruption-Free Implementation

Installation schedules preserved uninterrupted emergency response capabilities during business hours.

EQUIPMENT USED

- Indoor Ruckus Access Points
- Outdoor Ruckus Access Points
- Switches
- Siklu Wireless Backhaul Units
- Cat6 Backbone Cabling
- Cat6 Patching Cable



RESULTS

A decorative horizontal bar with three segments in blue, green, and orange.

Our network enhancement program delivered outstanding results.

98%

Wireless coverage in key operational areas with signal strength of -65 dB or better.

100%

Reliable, secure connections supporting real-time data and mission-critical communications.

100%

Scalable infrastructure designed for technological evolution and expanded departmental connectivity needs.

Zero Downtime

Ensured zero downtime, which is critical for uninterrupted emergency operations.

