OKLAHOMA DEPARTMENT OF PUBLIC SAFETY (DPS) OKLAHOMA, USA

THE CLIENT

Oklahoma DPS is a multi-service safety and law-enforcement organization, with approximately 1500 civilian and uniformed employees across the state, including Oklahoma Highway Patrol. Highway Patrol's troopers are responsible for patrolling the state's 111,994 miles of city, county and state-maintained roads and highways. Field troopers are first responders to emergency situations from traffic collisions to natural disasters and civil disorders.

SITUATION

The issue OK DPS faced was a lack of coverage due to the aging VHF Low-Band System across a third of the state of Oklahoma. As a lot of the areas the Highway Patrol covers are remote and state troopers can be out there alone in their vehicles, these coverage issues were making staying safe and connected challenging.

As a result, OK DPS was interested to know how they could provide more complete radio coverage to their state troopers so they could stay in contact with dispatch and each other statewide.

RESPONSE

In a search for solutions, several options were explored OK DPS looked at augmenting the existing state-wide 800MHz trunked system with VHF trunking sites. This would've fixed the coverage issue but would also have required changing 25,000 terminals to expensive dual-band models.

Authorized Tait Dealer Stolz Telecom suggested a more cost-effective P25 700MHz Voted Multicast solution. This was based on a thorough Oregon study from 2008, involving test equipment across a wide area for coverage testing when the state was trying to decide between VHF and 700 MHz. This investigation found that 700MHz covers just as well as VHF.

"As a result, OK DPS gave us access to their sites to design a coverage plan for consideration. In the end we presented a solution we believed would solve the issue, involving 35 sites and covering a third of Oklahoma, approximately 210,000 square miles," says Robert Stolz, President of Stolz Telecom.

OKLAHOMA, USA

LOCATION

PUBLIC SAFETY

EXPERTISE

SOLUTION OVERVIEW

▶ 35-site P25 700MHz Voted Multicast solution

▶ Powered by Tait TB9400 base stations

▶ Authorized Tait Dealer: Stolz Telecom

OUTCOMES

Oklahoma's state troopers now have much more complete two-way radio coverage across the state, thanks to the cost-effective Tait solution Stolz Telecom implemented to plug coverage gaps.

The in-fill coverage solution was faster to design and install, and markedly less expensive than solutions presented by other vendors. The cost for the investigation, design work, supply and configuration of the radio network equipment and user training came down to a fraction of the cost from other providers because of how Tait base stations are engineered.

"With Tait, in terms of voting and multi-casting, everything is done in the base station. This 35-site project really shows that Tait can support large networks. Tait is the only manufacturer that allows you to do P25 700MHz Voted Multicast networks without needing external voters," Mr Stolz says.

The Field Technicians also really like the remote access and spectrum analyzer capabilities of the TB9400 Base Station to remotely diagnose issues in real-time. This saves hours in driving to remote locations that are sometimes 5 hours away.

BUSINESS BENEFITS

▸ Oklahoma State Troopers are connected in more locations with more complete radio coverage across the state.

▸ Increased efficiency and improved health and safety.

▸ The Tait solution was faster to design, install and more cost-effective than alternative options.

▸ TB9400 provides operation in 700/800MHz and VHF bands and IP connectivity, offering flexibility in network design and scalability.

▸ Field Technicians have remote access to the TB9400 Base stations to diagnose issues in real-time.

For anyone looking at an augmentation of a wide network or anyone with an older analog network who is looking to move to APCO P25 and wants to have a multicast, or even a simulcast network, Tait Communications is a great cost-effective answer.

Robert Stolz, President Stolz Telecom