

## CASE STUDY | Bangs Ambulance

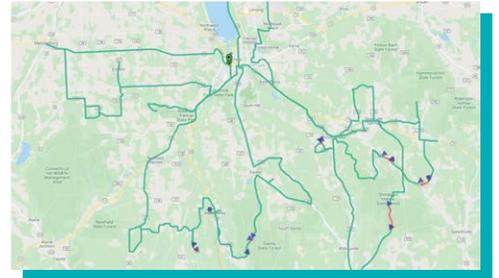
### THE CHALLENGE

The Finger Lakes region of New York is a semi-rural community with a wide range of terrain that includes hills, valleys, waterfalls, and expansive stretches of state forest land. Due to the challenging landscape, traditional cell phone connectivity outside of urban areas in the region is unreliable and spotty at best. The outskirts of the county have a limited population and typically no cell phone service. This terrain presents a massive challenge in emergency response situations when first responders need to stay connected with 9-1-1 call centers, local hospitals, and their own teams.

### THE CUSTOMER

Bangs Ambulance is a complete Advanced Life Support Service providing care to Ithaca, New York, and all of Tompkins County in the heart of the Finger Lakes. Bangs Ambulance is part of a fast-paced emergency medical system that strives to keep abreast of the ever-changing scene of pre-hospital emergency care and inter-facility medical transport. Bangs Ambulance has been providing the finest quality patient care since 1945.





## THE SOLUTION

Bangs Ambulance saw significant improvement in connectivity after switching to FirstNet, and even greater coverage after installing AirgainConnect AC-HPUE. AirgainConnect is the first antenna-modem built for FirstNet® MegaRange™, the High Power User Equipment (HPUE) solution available on Band 14. AirgainConnect's patented technology is capable of transmitting the maximum allowable radiated power directly to the LTE antenna elements. When compared to a conventional modem, AirgainConnect maximizes coverage, building penetration, and throughput for critical communications applications.

## THE OUTCOME

After implementing AirgainConnect and FirstNet MegaRange™, Bangs Ambulance experienced an increase in connectivity which enabled it to close the gap in coverage and stay connected during 99.8% of miles traveled, even in dense forest lands and challenging rural areas where there was previously no connectivity. The end result allows Bangs Ambulance to:

- Keep in constant communication with their 9-1-1 centers and CAD (Computer Aided Dispatch) to receive patient in-take and crew safety information.
- Utilize Wi-Fi calling and laptops with nearly 100% wireless coverage connecting to the Wi-Fi hotspot within the ambulance.
- Improve and tailor treatment-in-place based on a patient's individual needs by consulting with physicians instead of using general standing order protocols.
- Reliably send telemetry data and patient information such as 12-lead EKGs and vital signs to hospitals while en route to the destination.

“When we switched over to using the AirgainConnect device and FirstNet MegaRange™, our ambulances have been able to stay connected essentially 100% of the time. Our paramedics were incredibly impressed with the improved coverage helping them to deliver critical patient care. This is a game changer because we can now use this new solution to improve connectivity and uplink data speeds – particularly at the edge of signal coverage.”

-Brad Marzolf, Dir. of Information Services, Compliance Officer at Bangs Ambulance