CITY OF PARMA
FirstNet™ CONNECTIVITY
Case Study

CHALLENGE

Located in the southwest suburbs of Cleveland, the City of Parma has quietly become quite a success story for its future-focused approach to Public Safety communications. With a population of more than 80,000 people within 20 square miles, Parma is a well-run community ranked as among America's safest cities with populations exceeding 25,000 people.

Keeping a community well-protected starts with keeping emergency responders well-connected. Due to budget limitations and siting concerns, Parma had a single tower that stretched to provide coverage for fire, police and emergency medical personnel using the EDACS Land Mobile Radio (LMR) system. The EDACS LMR system was among the first installed in the county and at its time, Parma was on the leading edge for Public Safety communications. Because advancements in broadband technology can deliver so much capability to end users, Parma was needing to bring its network back to the future.

According to T.J. Martin, Communications Coordinator for the Parma Fire Department, “LMR will always be the backbone of our Public Safety system, but we owe it to our citizens to deploy the best of what technology can deliver. We needed both voice and data, along with increased coverage that could be there as Parma grows.”

Another important factor driving change in Parma was the need for interoperability with neighboring cities. Accessing the nationwide public safety network (FirstNet) would achieve interoperability objectives, but that could not come at considerable expense or disruption.

“We needed a transition plan that would work with our existing LMR system and would smartly put us on the path to FirstNet.”

T.J. Martin, Communications Coordinator
for the Parma Fire Department

SOLUTION

Martin reached out to L3Harris Dealer, Alan Close, at Cleveland Communications to architect and execute Parma’s migration. Close was instrumental in the 1989 installation of the city’s EDACS system and has been supporting them ever since.

Parma officials were quick to embrace Close’s latest vision and the rich benefits FirstNet Public Safety Broadband would bring. He and his team mapped out a plan to connect the L3Harris VIDA Core for Parma’s P25 Phase 1 system to the AT&T FirstNet LTE network using an Inter-RF Subsystem Interface (ISSI) gateway.

Close began the project in early 2018 by coordinating with technicians from each of the critical parties: Parma, AT&T and L3Harris Corporation.

Commenting on the project, Martin said “the VIDA core had a ton of space and capability, essentially giving us the best of both worlds—the ‘always there’ reliable...
LMR network coupled with the endless possibilities provided by the LTE network. We’re able to integrate biometric monitors to watch the health of fire fighters and use GPS to coordinate fire response in-building. Everything is seamless and we did not break the bank or scrap our existing network.”

Close was also instrumental in providing Parma emergency medical technicians with the ability to conduct video conferences between ambulances and emergency rooms. Parma installed routers in vehicles and equipped personnel at both ends with tablets that could share video and data, enabling ER doctors and technicians to ready equipment for critically-injured patients before they arrived at the hospital.

Now, with the access to FirstNet, Parma will have even more technology-enabled capabilities across the entire city.

“I’m a believer in keeping up with the pace of technology,” said Martin. “Anything that gives us the ability to integrate future capabilities using our existing infrastructure is a win for us and a huge win for our citizens, who ultimately benefit as we deploy new technology for law enforcement, fire response, or medical personnel.”

RESULT

Cleveland Communications helped City of Parma complete the project by testing that yielded no issues.

“I attribute some of the success to choosing the right partners. L3Harris and Cleveland Communications are extremely innovative in their approach to technology and are committed to continuously delivering new capabilities,” said Martin.

Beyond the benefits to end users, connection to AT&T FirstNet gives Parma the interoperability they were seeking at the outset of this project. By leveraging the Parma VIDA core, the neighboring communities of Medina County and City of Elyria are able to access FirstNet through their multi-site P25 networks.

“More interoperability across our broader region and across the whole state of Ohio will mean better services to the public,” added Martin. “That level of forward thinking is good government that is made possible when industry and agencies work together to leap technical hurdles. The challenges facing us in Parma are not unique to our city. No doubt there are hundreds of folks just like me who are on the hook to make miracles happen with their networks. The great news is there’s now a proven playbook for bringing public safety networks into the future.

T.J. Martin, Communications Coordinator for the Parma Fire Department