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CASE STUDY

Municipality
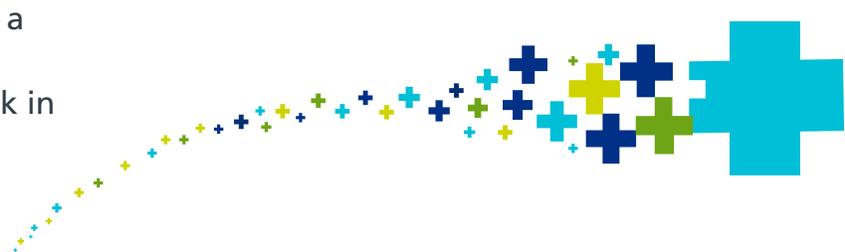
City of Richardson, Texas, USA

About Customer

Richardson is a principal city in Dallas and Collin counties in the state of Texas. Richardson is a vibrant community, kept current by the Richardson City Council and their emphasis on economic development and neighborhood integrity.

A suburb of Dallas, Richardson is the heart of a significant employment center, the Telecom Corridor® area. More than 88,000 people work in the City of Richardson each day.

"During our requisite proof of concept process, we were originally looking at various mesh solutions. We quickly realized that the only equipment that offered us the non-stop reliability we require is an end-to-end 4G wireless broadband network."

Steve Graves, Chief Information Officer with the City of Richardson

City of Richardson, TX, USA

Customer type: Government / Municipality
Application: Public Safety and Video Surveillance

The Challenge
With more than 5,000 businesses operating within Richardson's 28 square miles (73 km²), including several of the world's largest telecommunications/networking companies, traffic has become a major priority for local government. City of Richardson officials decided to introduce a wireless traffic digitalization system to improve traffic flow into and throughout the city.

The Solution
The City rolled out a wireless, high-speed 4G communications network including base station equipment, network planning and optimization, the Network Management System, CPEs connected to the traffic controllers and more.

The Telrad smart city solution provides connectivity to the City's high-quality video surveillance network that delivers live feeds to police headquarters and to a 24/7 Emergency Operations Center. The high-quality feeds can also be viewed from any PC monitor within the public safety network. Telrad's base stations have been deployed on various water towers and tall buildings across the city to enable ubiquitous coverage.

The Result
The system provides high-speed connectivity to all intersections, cameras, and other gear. The result is an improvement in the coordination of traffic signals and incident response. This provides a tool for local government to better manage changes in traffic and essentially improve the overall quality of life for residents and commuters.

Overall there is a significant monetary savings over other evaluated alternatives and the system is future-proofed while being simple to maintain and operate.

Delivering a successful 4G deployment has allowed the City to meet a set of critical business needs, while also providing a very flexible method for delivering broadband data quickly and affordably.

The Partner
Crystal Communications, Ltd. specializes in the design, installation, and support of broadband wireless systems and high-speed network infrastructure. Headquartered in Kingwood, Texas, Crystal Communications offers leading edge wireless solutions combined with the expertise necessary to succeed in today's converging communications environment.

Additional Applications
The network supports many applications for the city. These include:
- Intersection controller data
- GPS Time/NTP Time sync
- Traffic video surveillance
- Traffic Counting equipment
- Remote viewing of traffic video detectors
- Public Safety Radio applications
- Emergency data deployment via portable tower
- Hotspot backhauls

Summary
After exploring all options, the City of Richardson determined Telrad's technology had the best mix of pricing and performance, and the architecture was straightforward and suited to a deployment of this size.