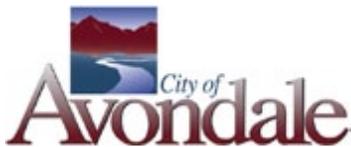


## City of Avondale, Arizona

### CUSTOMER



City of Avondale, Arizona

### INDUSTRY

Local & State Government

### THE CHALLENGE

- A network for public safety applications including water quality control.
- Low total cost of ownership.
- Scalable for future network growth.

### THE SOLUTION

- Redline's RDL-3000 Virtual Fiber™ for local & state governments.

### THE RESULTS

- Extremely reliable wireless network for machine-to-machine applications.
- High performance to capably handle video, voice, and data applications.
- Scalable network with a low total cost of ownership.

### REDLINE PROVIDES RELIABLE MACHINE-TO-MACHINE COMMUNICATIONS FOR PUBLIC SAFETY NETWORK

Avondale is a technologically progressive city that relies on wireless communications for the majority of its public safety services. The amount of traffic over their wireless network has grown steadily over the years to accommodate population growth, additional services, and more users. City officials realized demands on the wireless system were increasing more rapidly than initially expected. More specifically, the City wanted to install a water monitoring system as well as a network of high resolution video cameras to monitor traffic at busy intersections which introduced the need for highly reliable Machine-to-Machine (M2M) communications.

The City knew their existing network did not have the capacity to handle the new M2M applications and its ability to grow was limited. Adding more traffic would soon result in a slow and unreliable network, unsuitable for public safety applications.

The City required a network that would be:

- Reliable enough to handle critical M2M data from water quality monitors
- High capacity to support multiple public safety applications including video surveillance
- Economical with a low total cost of ownership
- Easily scalable for future network growth

### REDLINE DELIVERS RESULTS

Avondale hired Network Infrastructure Corporation, a network integrator, to assess their options and oversee the installation of the new network.

After considering wired and leased line options, Redline's RDL-3000 Virtual Fiber™ family of wireless products was chosen for Avondale for 3 key reasons:

1. It offers the reliability of fiber for critical M2M data
2. It is powerful enough to accommodate a variety of applications — from voice to cameras to water sensors
3. It has the flexibility with a low total cost of ownership and simple scalability via software upgrades

Avondale began the network transition by replacing some of the old wireless equipment with Redline systems. City officials immediately noticed an increase in the reliability of connections and improved signal integrity. This was enough to convince them to replace the entire network with Redline wireless systems.

With this new reliable network the City was able to install an M2M system for water quality monitoring. Redline wireless systems were connected to water sensors placed at the wells and water pumps to send real-time data to a central monitoring station where an automated system is programmed to detect any possible tampering. Redline is ideal for this application because the systems deliver consistent connectivity, provide the highest level of data integrity and offer high reliability to ensure critical data is delivered end-to-end.

Redline's wireless system also delivered so much improvement in capacity the City was able to add high



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*"Reliability has been the #1 benefit of the Redline network. 98% of our City communication is wireless using Redline's system. We needed something cost effective that we could own. Nine time out of ten, wireless will be faster, easier and more reliable than fiber and a better return on investment."*

Michael Reese  
IT Network RF Engineer  
The City of Avondale, Arizona

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resolution IP video cameras to monitor traffic at busy intersections around the City. Critical images from the cameras are reliably captured and delivered to help improve traffic flow and safety.

In addition to having a robust and reliable network, Avondale is enjoying a low total cost of ownership because, unlike systems that run on leased lines, the Redline network is completely owned and managed by the City and does not come with recurring costs. Avondale can easily manage their network growth by adding additional systems or enhancing performance of existing ones through software upgrades — when they need it.

## ABOUT REDLINE COMMUNICATIONS

Redline Communications is the innovator of Virtual Fiber™, a rugged broadband wireless solution used by companies and governments worldwide to cost effectively deploy and manage distributed services and applications. Redline's resilient products provide machine-to-machine connectivity over wide areas in even the harshest environments, and are used to facilitate and enhance public safety networks, deploy and extend secure networks, and connect digital oil fields and smart grids. Redline has been delivering powerful, versatile and reliable wireless systems to governments, the military, oil and gas, and the telecom industry for over a decade through certified partners in the Americas, Middle East, and Africa.

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