

### **THE STORY**

Colleges and universities are often large, encompassing residence halls, classroom buildings, student recreation centers, other sports facilities, libraries, and even multiple campuses. Commonly, radio systems such as are used by campus security that are deployed at these different campuses are too localized to provide campus-to-campus coverage on their own. Acknowledging the inadequacies and vulnerabilities this creates, this college decided it was time to gain continuous radio communication between four of its campuses, with the potential to increase coverage to additional campuses in the future.

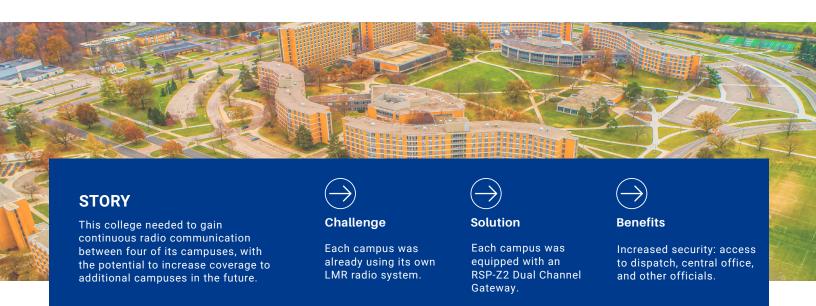
INDUSTRY Education

APPLICATION

Wide Area Communications

#### THE CHALLENGE

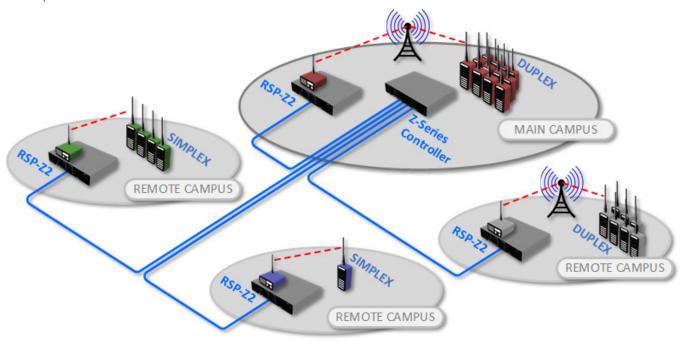
Each campus was already using its own LMR radio system. Users were familiar with it, and it had been working well. So, the solution needed to be transparent to those radio users. However, the coverage area of each of the four radio systems was insufficient to reach the other campuses. Simply increasing the coverage areas was not possible for logistical reasons and cost. For example, two of the campuses were not even using repeaters, relying solely on radio-to-radio simplex communications. It is not uncommon for a lone campus security official with a radio to have no ability to communicate with dispatch or other officials. It was clear, the four distinct radio systems just needed to be linked together to work as if they were one.



# **COLLEGE CAMPUS**

## THE SOLUTION

With the prevalence of IP networks – especially managed networks such as are found on college and business campuses – one of the easiest and most versatile ways to link separate radio systems together is to convert the radio audio to a digitized format to be sent over the network. To do this, a gateway such as the RSP-Z2 can be used. Therefore, the main campus and each of the three remote campuses were equipped with an RSP-Z2 Dual Channel Gateway. Each gateway was then paired with donor radios that allow for duplex and simplex communications with LMR users at each location.



#### THE RESULT

College security and staff members can use their land mobile radios to communicate within the coverage area of any campus location with other security staff members at any of the other campuses. The JPS solution is radio protocol agnostic, allows LMR users within any remote coverage area to share communications regardless of their transmit or receive frequency assignments, and is not dependent on radio infrastructure or architecture.

The use of JPS Bridge protocol and the campus managed network allowed all security officials to have reliable LMR capabilities on a wide area system basis.

## **KEY BENEFITS**



Increased virtual radio coverage area by leveraging IP networks.



Reliable LMR capabilities on a wide area system basis.



Transparent link between different radio systems.