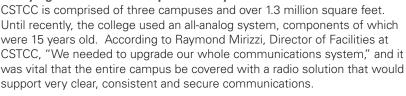# Cincinnati State Technical College and Community College

Cincinnati, Ohio

Cincinnati State Technical and Community College (CSTCC) needed to migrate to a communications system that would support clear coverage over a large area and cost-effectively accommodate multiple talkgroups.

Studying the Needs of Campus Security

CSTCC is comprised of three campuses and over 1.3 million square feet. Until recently, the college used an all-analog system, components of which were 15 years old. According to Raymond Mirizzi, Director of Facilities at CSTCC, "We needed to upgrade our whole communications system," and it was vital that the entire campus be covered with a radio solution that would support very clear, consistent and secure communications.

The three-part campus needed a supervisory channel that would provide the flexibility for critical security officers and related personnel to communicate during times of crisis. Of course, because such emergencies can arise at any time, it was also critically important that the migration from analog to digital proceed smoothly and quickly because even brief downtime could put the campus at risk.

A budget had been established, and CSTCC expected a lot of value for their investment.

An Educated Customer Makes the Right Choice

A consultant was sent to work with CSTCC to determine needs, assess the options, and help them make the right choices. Because MOTOTRBO is still a relatively new solution, it was also important to provide CSTCC with a hands-on demonstration so they could get a sense of the potential that MOTOTRBO could offer.

After the demonstration, CSTCC was so excited about the product that they asked for a quote immediately so they could present it to their trustees that evening. With the recent tragedy at Virginia Tech, trustees were very eager to implement a more secure communications system. The trustees appreciated that security is built into this digital solution: when users monitor digital communications, they hear only that the channel is in use – they don't hear the actual conversation.

Cincinnati State Technical and Community College: MOTOTRBO Deployment At-A-Glance

Motorola User:
Cincinnati State Technical and Community College

Project Location:
Cincinnati, Ohio

Applications:
Talk groups

Website:
http://www.cincinnatistate.edu/

"MOTOTRBO was our choice," explains Michael Wylie, Director of Environment and Public Safety at CSTCC. According to Wylie, based on the demonstration it was obvious that "MOTOTRBO electronics were much better and reception was much clearer than what we had in our old analog system."

Wylie was working under a budget, and MOTOTRBO supports lower cost of ownership compared to analog systems because fewer repeaters are required: two voice channels are utilized in one 12.5kHz frequency channel, so only one repeater is needed for every two voice or data paths. Considering all factors, Wylie concluded that "we could replace our old system with this higher quality solution at a reasonable cost."

MOTOTRBO also proved to be a way to ensure a smooth migration from analog to digital, supporting dual mode operations that could enable backwards communication between new units and older units already in place. Following this migration strategy, CSTCC could buy a few MOTOTRBO radios and use them in the analog mode; as time and budget allowed, they could then start migrating a few radios at a time to digital.

Graduating to a Better Communications Solution
Mirizzi understands that "when you're going offline to restart a new system, there will be a down period, and that can be a big problem if there's an emergency taking place. When we switched to MOTOTRBO, however, most people on campus didn't even know we switched over. It was that smooth."

MOTOTRBO is now installed at CSTCC with 16 channels, one of which is to be used exclusively by supervisory personnel. According to Wylie, "This afforded us the opportunity to carry on confidential conversations without everyone else hearing what was going on." Having this supervisory

channel would mean that CSTCC didn't have to buy an extra FCC license or a new conventional repeater.

The security repeater has ten units running off it; the facilities repeater has forty units running off it – and each one can be expanded to several hundred users, so there's plenty of room to grow.

MOTOTRBO also provides much clearer audio quality than is possible with analog, especially in fringe coverage areas – and that's especially important on this sprawling campus. A digital signal is inherently clearer than analog; and with noise suppression technology, MOTOTRBO audio becomes even crisper and sharper. "MOTOTRBO gave us the ability," Mirizzi says, "to communicate at a greater distance and branch out and create different channels for our internal operations. And then we had the opportunity for facilities and security to come together and communicate as one group, bringing together the right people at the right time."

MOTOTRBO – Ready to Grow, Digitally
Designed to facilitate quick and easy migration and operate in mixed analog and digital environments, MOTOTRBO's digital technology can be adapted to a number of different work environments, seamlessly supporting industry-specific applications. The open, flexible and licensable data interface offered by MOTOTRBO is designed to be regularly enhanced through 3rd party devices and applications, making MOTOTRBO a terrifically expandable platform that gives users the opportunity to upgrade their radios as needed for continuously higher performance.

MOTOTRBO is a complete system of mobile and portable units, repeater, data applications and accessories that can be easily adapted meet specific customer needs, whether in education, service or industrial environments. A forward-compatible platform, MOTOTRBO provides a solid foundation for future growth of a communications system.

MOTOROLA