



# ILLINOIS SCHOOL DISTRICT IMPROVES SITUATIONAL AWARENESS AND SHORTENS RESPONSE TIME

MOTOTRBO™ RADIOS AND TELDIO RBX APP EQUIP THEM FOR EVERYDAY OPERATIONS AND EMERGENCIES



Located in Mundelein, Illinois, in the northwestern suburb outside Chicago, Fremont School District 79 (SD 79) is composed of three schools: elementary, intermediate and middle. The district enrolls over 2,200 students in kindergarten through eighth grade, covers a 36-square mile area, and draws from seven neighboring communities.

Fremont SD 79 is known for its spirit of continuous quality improvement, with open, transparent communication with the public about school performance. The priority is to create a safe learning environment to further its mission of “preparing today’s child for tomorrow’s world.”

As Mike Tanner, their Director of Business Services points out, in the aftermath of an alarming number of incidents of school violence around the nation, their district placed even greater emphasis on tightening campus security and creating a culture of increased safety for students and school personnel.

A variety of factors prompted the district to adopt a more robust and reliable solution than incumbent push-to-talk cellular. They discovered that the combination of the MOTOTRBO digital two-way radio system and Teldio’s Radio Branch Exchange (RBX) telephone interconnect application would provide real-time communications – and a direct connection to 9-1-1 dispatchers – to increase school safety.

## CUSTOMER PROFILE Fremont School District 79

- Mundelein, Illinois
- 3 schools, over 2200 students and 167 personnel

## MOTOROLA SOLUTION

- MOTOTRBO SL 7550 Portable Radios
- MOTOTRBO XPR™ 4550 Base Station
- MOTOTRBO XPR 8400 Digital Repeater with Capacity Plus
- Teldio RBX Telephone Interconnect Application

## FEATURES

- Resilient, always available communications
- Accelerated response time in an emergency
- Instant, efficient group calling
- Clear, continuous coverage district-wide
- Excellent return on investment and no monthly charges

## THE CHALLENGE

### Replace Push-to-Talk Cellular with Reliable Radio

Located in a rolling, semi-rural region of Lake County in northwestern Illinois, Fremont SD 79 is a largely isolated district. Since its campus is surrounded by forest preserve, cellular coverage is spotty and non-existent in certain sections of school buildings.

“Our cell signal was weak,” explains Mike Tanner, Director of Business Services. “It didn’t reach into the lower levels of our schools where we really needed it, such as the cafeteria, storage and mechanical rooms. Our cell coverage was not only unreliable, but Nextel stopped supporting the push-to-talk network which eliminated the redundancy we wanted to have in a communication system.”

### Increase School Safety with Real-Time Communications

A convergence of factors – the lack of coverage in certain areas of the schools, spotty cell reception, the decommissioning of the Nextel cellular service along with an upcoming renewal cycle with the carrier – was the catalyst for the district’s search for a robust communication solution.

Mike Tanner, a military veteran, was familiar with the many advantages of two-way radio. He knew that the coverage, clarity, reliability and redundancy of a digital radio network are unparalleled. “We recognized the need for a reliable, always available communication system. Particularly after the Sandy Hook Elementary School shooting, we were looking for a more robust security solution for our schools, and that was two-way radio,” he says.

### Connect Radios Directly to 9-1-1 Call Centers

Whether it is a routine sports injury which requires medical attention or an unusual event such as a missing student that triggers a countywide alert, Fremont SD 79 wanted to maintain a direct line of communication with the 9-1-1 call center in Lake County.

“One of the challenges for us from an EMS and law enforcement standpoint is our isolated location,” explains Mike Tanner. “It might take 10 minutes for a deputy sheriff or 15 minutes for an ambulance to arrive, so we wanted to shorten that response time by enabling our people to talk directly to a dispatcher in an emergency instead of being relayed through an office. This capability was very important.”

## THE SOLUTION

### MOTOTRBO Responds with No Recurring Costs

Based on a referral from another district, Mike Tanner contacted Chicago Communications LLC, the local Motorola channel partner. Account Executive, Cathy Kulnig, recalls that in addition to coverage issues, Fremont SD 79 was experiencing all of the challenges of cellular. “They were at the mercy of the cellular system and carrier,” she says. “Fremont’s administration wanted reliability and security tightened at their schools. With all the events occurring in schools today, they were looking for a better way to improve safety and MOTOTRBO was the right solution.”

According to Kulnig, the school district wanted the cellular capability of being able to call 9-1-1 directly. “Even though cellular offers instant communication like two-way radios, it is public, not private, and does not have the built-in redundancies, coverage and all call capabilities of a radio system. It is also very expensive with recurring monthly costs,” she says. “MOTOTRBO is a one-time investment that pays for itself in just a few years, provides one-to-many communication with the capability to make a 911 call in an emergency.”

### Private Network is Always Available

“We needed robust communications that worked all the time,” explains Mike Tanner. “We wanted a system that was independent of cellular networks. In an emergency when hundreds of parents show up at the schools and saturate the phone network, we wanted it to function no matter what.”

Tanner also liked the zone capability of MOTOTRBO radios that enables schools to operate on their own internal network, talking to each other on a common channel while still being reachable on a district-wide emergency channel. “It is like having our own private network and reducing overall conversational chatter,” he adds.

“Not only did we eliminate cell phones, but our personnel are very satisfied with MOTOTRBO radios as the best tool for managing work around campus.”

Mike Tanner,  
Director of  
Business Services,  
Fremont SD 79





### **MOTOTRBO's Capabilities are a Must-Have for Schools**

In December 2014, Fremont SD 79 switched over to MOTOTRBO SL 7550 portable radios. Ultra-slim and sleek, they were like the cell phones personnel had before, but professional-grade for everyday use and abuse. The compact SL 7550 portables are powerful, reliable and have excellent durability and long battery life – ideal for school users.

“The SL 7550 radios are lightweight, unobtrusive and easily worn with an outfit,” says Mike Tanner. “We intentionally selected these devices to fit the people using them. Our personnel are much more likely to carry the radios, and they are really embracing them.”

Forty SL 7550 portables were distributed to front line administrators, the business office, transportation director, custodians, technology staff, playground aides and PE instructors who often teach students off campus. Even when personnel are out of sight, they are seamlessly within radio contact.

### **Call for 9-1-1 Directly from the Radio**

Chicago Communications, LLC recommended an advanced telephone interconnect app from Teldio, a certified Motorola applications developer. RBX is designed to allow radio users to make and receive phone calls directly on their MOTOTRBO digital radios.

Teldio's RBX goes beyond basic telephone interconnects by giving radio users access to familiar phone-like features. Designed to easily scale, it was connected as an interchange directly into the district's PBX phone system.

This interoperability with the telephone system means any school employee can make a call from a MOTOTRBO radio directly to 9-1-1 dispatchers. “This capability is important for all our personnel, but particularly for those who are outside monitoring playgrounds and sports activities and don't have access to a landline in the building in an emergency,” says Mike Tanner.



**“We use MOTOTRBO radios to support potential security incidents as well as streamline everyday operations. However, having an instant connection to 9-1-1 is very important to us.”**

Mike Tanner, Director of Business Services, Fremont SD 79

## THE BENEFITS

### Faster Collaboration and Better Situational Awareness

The ability to streamline communications with MOTOTRBO group calling creates greater safety and efficiency. "In the past, if a student was injured or missing from a building, we didn't have the capability of group calling with cell phones. Now with the various radio zones, we can provide situational awareness, at any time during the incident, to all the people responding. That's one of the key benefits of MOTOTRBO radios," says Tanner.

### Excellent Coverage and Clarity, in Buildings and Beyond

The installation of the MOTOTRBO repeater eliminated the coverage problems and extended the range of communications. MOTOTRBO radios connect the entire district, so if there is a bus accident or a need to move a school to an alternate location, the radios perform clearly and reliably. In addition, the school has been able to turn lower-level space into multiple classrooms that are reachable by radio – an unexpected benefit. "The clarity and quality of MOTOTRBO is very good, as is coverage inside our buildings. The ability of the radios to pick up a voice clearly and transmit it without background noise is excellent," says Tanner.

### Immediate 20 Percent Return on Investment

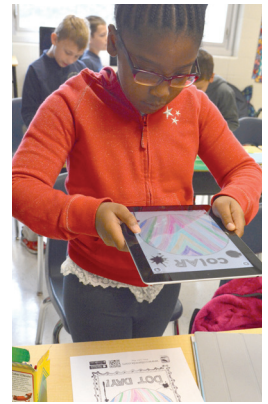
Fremont SD 79 realized the cost-saving benefits of MOTOTRBO radio from the start. "We were spending thousands of dollars a year to have a Nextel solution that was not working for us," says Mike Tanner. "The Nextel bill was confusing and had constant add-on charges. It was an unwieldy mess we don't have to manage anymore. Now we have 20 percent return on investment for enhanced capabilities with MOTOTRBO. For us, the decision was a no brainer."



### Increased Safety for Schools, and Interoperability with Public Safety

Today, MOTOTRBO radios are a key component of the district's integrated security plan. By being able to talk directly with 9-1-1 dispatchers, it enables them to shorten response time with first responders. In the near future, Lake County will be transitioning to the statewide Motorola STARCOM 21 network. Because MOTOTRBO is compatible, Fremont SD 79 is already positioned with the Teldio app to connect to public safety agencies.

"Our people are very confident having MOTOTRBO radios," emphasizes Mike Tanner. "I monitor them every day and knowing that students are safe is a capability we didn't have before. I can walk anywhere in the district and be instantly reached, and that is an incredible benefit. We can all hear the same conversation at the same time, be proactive and manage an incident. No question, the situational awareness MOTOTRBO radios provide is critical for increasing our school safety."



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Mike Tanner,  
Director of  
Business Services,  
Fremont SD 79

To improve situational awareness and response time, visit [www.motorolasolutions.com/education](http://www.motorolasolutions.com/education) or contact your local Motorola representative.

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