

# HUNTSVILLE CITY SCHOOLS DISCOVERS A SMARTER WAY TO IMPROVE COMMUNICATIONS

#### MOTOTRBO™ DIGITAL RADIOS OUTSMART CELL PHONES FOR SCHOOL OPERATIONS



Huntsville City Schools is one of the premier districts in Alabama. Its 33 Pre-K programs, 21 elementary schools, eight middle schools, seven high schools and five P-8 schools serve more than 23,000 students. Located in a thriving technologically-advanced community, Huntsville is known as the Rocket City for its affiliation with U.S. space missions and named one of the "Top 100 Best Places to Live" in the U.S.<sup>1</sup>

Despite this tech-savvy environment, Huntsville City Schools was hampered by shortcomings with the cell phone system used by its Operations Department. Problems ranged from insufficient coverage to the inability to hear clearly where personnel worked most often – in basements, boiler rooms, back rooms and on roofs.

Huntsville City Schools' communication challenges were not unique; in fact, their situation mirrored those of business leaders nationwide. More than 60 percent of whom say the "need to hear clearly in noisy environments" is a top consideration when choosing mobile devices.<sup>2</sup> After exploring alternatives, Huntsville City Schools decided to replace their cell phones with MOTOTRBO digital radios with voice and data. They gained communication without compromise at significant cost-savings and discovered what a smart choice MOTOTRBO can be.

#### **CUSTOMER PROFILE**



• Over 23,000 students, 1700 teachers, 40 schools

#### MOTOROLA SOLUTION

- MOTOTRBO™ XPR™ 6550 Portable Radios
- MOTOTRBO SL 7550
  Portable Radios
- MOTOTRBO XPR 4550
  Mobile Radios
- MOTOTRBO Connect Plus Commercial System

#### **SOLUTION FEATURES**

- Near-perfect coverage for instant response
- Crystal-clear communication
  in noisy environments
- GPS location tracking of personnel and fleet
- Significant cost-savings over cell phones

### **THE CHALLENGE**

# COMMUNICATE EVERYWHERE WITHOUT LOSING COVERAGE

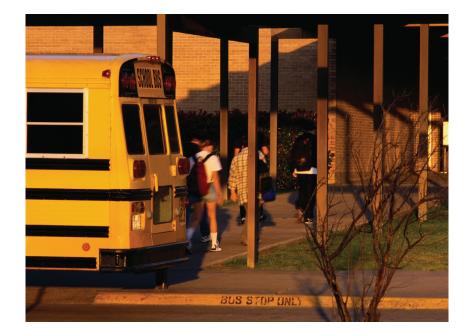
While Huntsville City Schools rely on Motorola radios on individual campuses, their Operations Department used smart phones to communicate across the district. Even though these devices were a leading brand, supervisors, dispatchers and service technicians were frustrated by continual issues with coverage and clarity.

From dead zones to dropped calls, personnel were unable to reach each other in a number of schools. Cell phone signals were unavailable in the places they frequented most: basements, boiler rooms and back rooms. What's worse, cellular coverage at two middle schools was non-existent and communication practically impossible.

"Our service technicians were having problems communicating with each other and with supervisors," explains Quanteaus Jones, Maintenance Supervisor for Huntsville City Schools. "We didn't have open communication; it was only one to one. There were situations where a service person was working on a piece of equipment and another technician knew the answer to the problem, but wasn't aware he needed help. In an emergency, everyone needed to hear the information and that wasn't occurring. We simply could not communicate effectively."

#### HEAR CLEARLY IN THE NOISIEST SITUATIONS

On top of coverage concerns, Huntsville City Schools contended with background noise overpowering conversations. Service technicians had to shout into their cell phones over noisy equipment, raucous air conditioning systems and rumbling boilers. "When you are in a basement or boiler room, you need to have clear communication," says Supervisor Jones. "Yet often we couldn't talk with our technicians. As a result, we would either have to call the school to check on them or leave a voicemail on their cell phones and wait until they returned to a quiet area or one with better coverage to retrieve the message."



#### PINPOINT PEOPLE AND VEHICLES, ON AND OFF CAMPUS

Headquartered in an annex, with a fleet of cars, trucks, dump trucks and commercial vans on call, the Operations Department services all 40 schools all year long. Teams of technicians are on the move, making repairs, checking buildings and traveling off site to purchase parts. "Even though we had GPS in our vehicles, we could not track people with our cell phones. Because our workforce is so mobile, it is very important to know the whereabouts of each individual," says Jones.

According to Supervisor Jones, the potentially hazardous and isolated places technicians work – on ladders, catwalks, rooftops and remote parking lots – makes instant, reliable communication a necessity. If someone is injured, it is imperative that individual is located and aided without dialing a cell phone or hoping for a connection.

"With MOTOTRBO, our technicians can stand right beside a 200-ton chiller and talk back and forth without any disruption or background noise. Communication is crystal clear."

– Quanteaus Jones, Maintenance Supervisor, Huntsville City Schools

### **THE SOLUTION**

## MOTOTRBO DIGITAL RADIOS ACHIEVE WHAT CELL PHONES CAN'T

After researching options, Quanteaus Jones contacted Sharp Communication, a local Motorola channel partner, about the SmartRadio commercial system described on their website. "Not only was Mr. Jones frustrated with the shortcomings of cell phones, but in certain schools they weren't getting coverage at all," recalls Trey Sharp. "We have a number of MOTOTRBO Connect Plus towers which provide excellent coverage. We gave him several MOTOTRBO portable radios to demo and he told us they got coverage everywhere and communication was remarkably clear."

"Right from the start, the MOTOTRBO radios were phenomenal," says Jones. "Not only did our technicians want to keep them, but our Director of Operations was absolutely impressed by how effective MOTOTRBO was. We have 99 percent coverage now, especially in the areas where we weren't able to communicate before with cell phones."

#### WIDE-AREA COVERAGE IS A CLEAR ADVANTAGE

"Because technicians move between so many different locations, they need seamless coverage throughout," explains Trey Sharp. "They have to be able to communicate from their vehicles, from within facilities, basically anywhere in the city at any time. The SmartRadio wide area coverage is absolutely critical for the school district. They pay a low monthly fee and leverage the great value of a reliable commercial radio system."

#### EXCEED EXPECTATIONS FOR EVERYDAY AND EMERGENCY OPERATIONS

"MOTOTRBO really broadened our communications tremendously," emphasizes Jones. While his department now has one-to-many communication, they also use private call for one-to-one. They can check the status of technicians without disturbing them with GPS tracking and send text messages to supervisors and directors when voice isn't practical.

Across the district, Huntsville City Schools uses MOTOTRBO for their heating and air conditioning, electrical, plumbing and carpentry calls. They rely on MOTOTRBO in security operations for 24-hour monitoring. All supervisors, service technicians and even warehouse personnel carry MOTOTRBO XPR Series and SL Series portable radios.

"We do everything from dispatch calls to GPS tracking of assets to communicating with our district's emergency response vehicles. We have a command post that has MOTOTRBO. In the event of an emergency in a school, everyone can instantly communicate together," says Jones.

#### PUT SAFETY AND EFFICIENCY IN AN ADVANCED CLASS

When inclement weather strikes, MOTOTRBO adds another level of efficiency and safety. "Our service techs walk the schools to check and see if pipes are broken, sidewalks are cleared, parking lots are scraped and ice melt is down," says Jones. "As they check each campus, they radio us to confirm and we record the date and time. It's all possible because of MOTOTRBO."



"We have 99 percent coverage now, especially in the areas where we weren't able to communicate before with cell phones."

 Quanteaus Jones, Maintenance Supervisor, Huntsville City Schools



"We really appreciate MOTOTRBO's 'man down' feature too. In our profession, we spend a lot of time on ladders, catwalks, basements and roofs. If someone is injured, they press one button and it sends a transmission to dispatch to contact all supervisors and immediately send help. When the alert goes out, we see their exact location via GPS," says Jones.

### THE BENEFITS

#### COMMUNICATION IS INSTANT AND ALWAYS AVAILABLE

"One of the important benefits Huntsville City Schools has experienced is instant, reliable communication," says Trey Sharp of Sharp Communication. "Severe weather can be a real issue in their area. When it happens, everyone jumps on cell phones, texts, pulls up weather apps and websites and the system can get overloaded. The school district is no longer subject to cellular overcrowding during inclement weather or an emergency. It's a key advantage of MOTOTRBO radios over cell phones."

#### RESPONSE TIME IS IMMEDIATE IN AN EMERGENCY

"Our response to emergency calls was very inefficient before MOTOTRBO. If we had a report of a potential natural gas leak at a school, it took 10 to 15 minutes to reach a technician via cell phone," says Quanteaus Jones. "Three days after we started using MOTOTRBO, we had an emergency call from a middle school about a natural gas odor. In two minutes we had technicians, maintenance and security on site. We evacuated the school, our dispatcher and Director of Operations were all aware, and we resolved the situation rapidly because of MOTOTRBO radios."

# ONE-TO-MANY COMMUNICATION IS MORE EFFICIENT

"Once Huntsville started using the MOTOTRBO radios, they immediately saw the benefit of one-to-many communication," says Trey Sharp. "If a technician was working on a problem, he could only talk to one supervisor on his cell phone. With MOTOTRBO, now twenty other maintenance technicians can hear that situation and may have the expertise to resolve the problem. They've really improved their efficiency."

#### **RADIOS SURPASS AND OUTLAST CELL PHONES**

Unlike digital radios, consumer devices aren't made for the rigors of school operations. In fact, smart phones are three times more likely to fail than radios<sup>3</sup> and over 20 percent fail mainly because they are dropped during the work day.<sup>4</sup>

"Our MOTOTRBO radios get dropped, abused, drenched in rainstorms, but we don't worry about them getting damaged like a cell phone would," says Jones. "I don't have to remind our service technicians to use their radios. They love them and are confident they have a tool that is very reliable."

#### **CLEAR, COMPLETE COVERAGE AT A LOWER COST**

According to Supervisor Jones, even though the school district pays a monthly fee for the Connect Plus tower rental, it is significantly more affordable per person than cell phones and includes free GPS. "We've seen tremendous cost-savings switching from cell phones to MOTOTRBO. We've saved at least 20 to 30 percent and cut down on overage fees with cell phones significantly," he says.

"When you do the math, Huntsville City Schools is saving an enormous amount of money in a short time, especially when you consider the cost of stand-alone voice and stand-alone GPS," adds Trey Sharp. "The return on investment really pays for itself with MOTOTRBO radios."

#### **SOURCES**

<sup>1</sup> Livability.com, October 2013

<sup>2</sup> Business-Critical Communications: Benefits of Selecting Two-Way Radios Over Cell Phones, VDC Research, April 2014

<sup>3</sup> Enterprise Mobility and Connected Devices, VDC Research, August 2013

<sup>4</sup> Mobile Device TCO Models for Line of Business Solutions, VDC Research, March 2013

To discover a smarter way to improve communications,

visit www.motorolasolutions.com/MOTOTRBO or contact your local Motorola representative.

Motorola Solutions, Inc. 1301 E. Algonquin Road, Schaumburg, Illinois 60196 U.S.A. **motorolasolutions.com** 1-800-367-2346

Part number: RC-4-5003. Printed in USA 07/14. MOTOROLA, MOTO, MOTOROLA SOLUTIONS and the Stylized M Logo are trademarks or registered trademarks of Motorola Trademark Holdings, LLC and are used under license. All other trademarks are the property of their respective owners. © 2014 Motorola Solutions, Inc. All rights reserved.

