



# SAFETY FIRST MAXIMIZING COMMUNICATIONS IN K-12 SCHOOLS

**GROWING CONCERNS. GREATER CHALLENGES. TIGHTER BUDGETS.**

K-12 schools are under enormous pressure to strengthen safety and improve efficiency with dwindling dollars. A recent survey of American educators emphasized how top of mind this is: 99 percent said creating a safe, secure environment for students and staff is their most important priority.<sup>1</sup> Yet elementary and high schools in 26 states received fewer funds in 2012-13 than in the year before. In 35 states, funding plummeted below 2008 levels.<sup>2</sup>

The mandate for safety extends beyond classrooms and corridors. It includes preparing institutions for disasters and weather events, coordinating a rapid response throughout a school or district, and keeping students safe off property – as they travel on buses, to field trips, tournaments and more.

The bottom line is, parents want to be confident their children are learning in a safe, secure place. School personnel need to know they can effectively communicate and interact together. And administrators must be equipped to coordinate a rapid response to any situation with up-to-date technology that fits their funding.

**WHAT CAN SCHOOLS DO TO INCREASE STUDENT SAFETY AND IMPROVE EFFICIENCY WITH FEWER DOLLARS?**

## PROVEN TECHNOLOGY PUTS SAFETY AT THE HEAD OF THE CLASS

Educators know that ensuring physical safety for students is paramount to their performance and success. This sphere of safety starts at the bus stop, continues as children move from classroom to cafeteria to off-site activity, and follows them as they board the bus and arrive home.

What today's administrators realize is that a coordinated, integrated and reliable communication system needs to be in place for this to happen smoothly. Two-way radios fit that criteria; it's why they play a major role in school districts for coordinating response and enhancing student safety.

In fact, the reliability, efficiency, clarity and coverage of two-way radios is so trusted and time-tested, they are the go-to technology for nearly half of the nation's schools. Forty percent of schools rely on radios as their primary form of communication; an additional six percent use them in conjunction with email, text messaging and other modalities. Eighty-five percent of schools that use two-way radios have their own private system and 15 percent lease access time.<sup>1</sup>

99%

OF EDUCATORS SAY CREATING A SAFE, SECURE ENVIRONMENT FOR STUDENTS AND STAFF IS THEIR MOST IMPORTANT PRIORITY<sup>1</sup>

7,478

INCIDENTS INVOLVING A FIREARM OR EXPLOSIVES IN ONE YEAR IN K-12 SCHOOLS<sup>3</sup>

30,193

INCIDENTS INVOLVING A KNIFE OR SHARP OBJECT IN ONE YEAR IN K-12 SCHOOLS<sup>3</sup>

## TAKE THE STEPS TO ENSURE STAFF INTERACT AND REACT

Two-way radios link together superintendents, principals, teachers, security, maintenance, bus drivers, coaches and even law enforcement agencies. Almost three-quarters of principals and nearly a quarter of teachers surveyed rely on this robust technology.<sup>1</sup>

Just as instructional tools – like tablets, e-books and interactive video – have evolved, so have two-way radio systems. Savvy educators are taking note of the improved capabilities – whether it's loud, clear audio or integrated voice and data. They're discovering that they can efficiently and affordably link staff with diverse communication needs, from task-oriented jobs to supervisory roles.

An increasing number of school districts are leveraging voice and data on two-way radios to enhance safety and expand accountability. GPS location tracking applications, for example, let them monitor buses, manage routes and even allow parents to log in and see exactly where their children are.

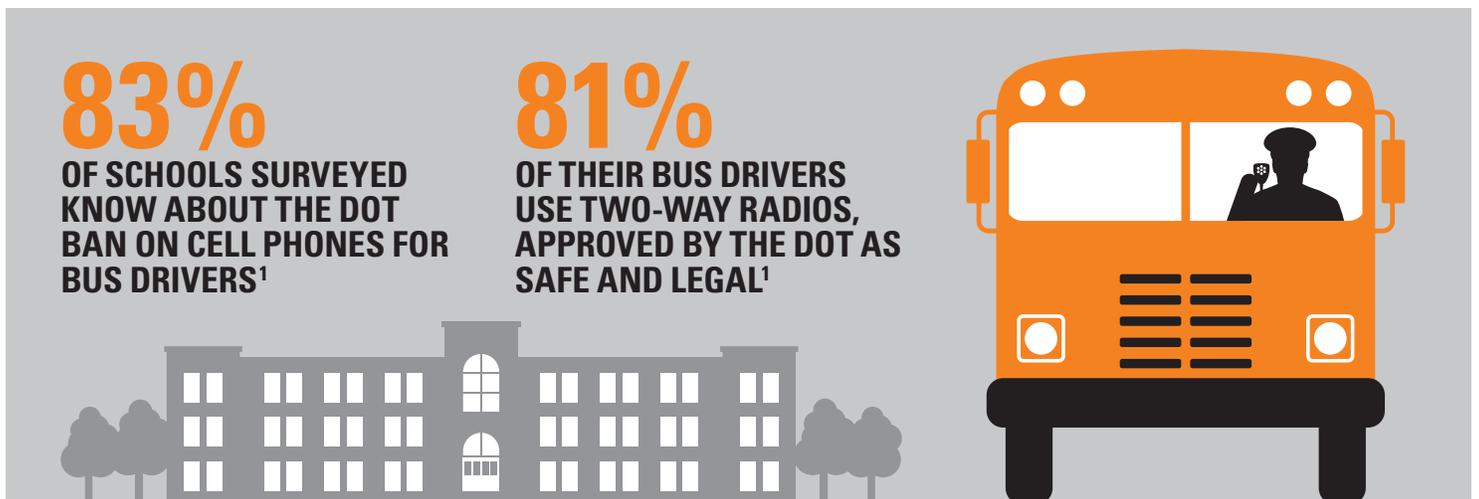
School districts are adopting safer solutions for their transportation personnel, too. Hands-free accessories enable bus drivers to talk safely on their routes. Unlike cell phones, two-way radios are approved by the U.S. Department of Transportation (DOT) as a safe and legal way for drivers of commercial motor vehicles to communicate on the road.

## INTEGRATED VOICE AND DATA DRIVES SAFETY HOME

According to a recent Motorola education survey, unified communications is one of the most pressing concerns for educators across the country. This is especially true when it comes to reaching personnel throughout the district, wherever they travel, such as bus drivers on their daily routes.

Fortunately, integrated voice and data on two-way radios is making huge inroads into solving that dilemma. For example, the emergency call button on drivers' radios alerts dispatch they need assistance immediately. Remote listening capabilities on the radio instantly monitor what is happening when a driver is unable to respond. Data applications inspect buses before they hit the road, check fuel consumption and track their upkeep. Other applications inform schools if bus doors are left open and whether or not drivers are on duty picking up students.

Out on the road, if dispatch needs to reroute buses around a major accident, they can send directions to the drivers with text messaging. As an added measure of safety, radio technology lets them know who is on board and who has stepped off. Administrators can efficiently identify and track students as they hop on buses by reading their RFID tag. Using wireless Bluetooth® accessories, bus drivers can check on students in the back of the bus or step out to inspect their vehicle, all while remaining connected to their radios in real time.



USING THEIR TWO-WAY RADIOS, BUS DRIVERS REPORT ACCIDENTS, TRAFFIC PROBLEMS, WEATHER, DOWNED BRANCHES AND POWER LINES AND FAULTY TRAFFIC SIGNALS. THEY ARE THE FIRST TO SPOT PROBLEMS AT BUS STOPS OR SCHOOL LOADING ZONES. **THEY ARE THE FRONT LINE OF CREATING A SAFE ENVIRONMENT FOR SCHOOLS.**<sup>4</sup>

## OPERATIONS-CRITICAL APPLICATIONS ARE A DEFINITE PLUS

Across districts large and small, GPS location tracking on two-way radios is helping schools monitor bus locations and manage logistics. Bus-fleet managers can determine the speed and location of vehicles, engine alerts, hard braking, fuel consumption and ignition status. They can re-route buses around local accidents and traffic jams, pinpoint where a bus is in real time, and gauge whether a driver is deviating from the route.

Other operations-critical applications also enhance safety, increase efficiency and reduce costs. For example, security personnel can be automatically notified if a school door or gate is breached and remotely open or close it. Maintenance can turn lights on or off, control sprinklers and handle a multitude of other tasks with their two-way radios.

## MAKE EMERGENCY PREPAREDNESS PART OF THE LESSON PLAN

Sixty-eight million children are in school or day care every day throughout the country. Yet more than half of the states and the District of Columbia do not mandate that schools meet minimum standards to protect children during major emergencies.<sup>5</sup>

Add to this the preponderance of super-sized weather events – from tornados sweeping through Oklahoma to Hurricane Sandy ravaging the east coast – and the imperative for immediate, reliable, always available communications can't be overstated.

While K-12 schools are making headway – with 64 percent saying they are “somewhat prepared” to navigate weather events and disasters – nearly 40 percent believe their district needs an updated communication system to better meet their school's needs, particularly for emergencies.<sup>1</sup>

## KNOW WHAT'S AHEAD AND HOW TO COORDINATE A RESPONSE

The more information school officials have at their fingertips, the more effectively they can prepare and respond. Before a storm strikes, NOAA weather alerts can be transmitted directly to two-way radios to warn of impending conditions. When emergencies erupt and personnel need to communicate instantly, the transmit interrupt suite on radios can be life-saving. This suite of voice interrupt, emergency voice interrupt and data over voice interrupt means schools can prioritize critical communication the moment it is needed.

Scalable, multi-site digital trunking systems that link hundreds, even thousands of radios, also ensure an entire institution or district is connected. Calls can be queued during busy times until an open channel is available, important personnel can be assigned priority status when the system is in high demand, and a wireline console can be used for centralized dispatch.

### TOP 6 PLACES TO USE TWO-WAY RADIOS<sup>6</sup>

- BUS AND STUDENT LOADING ZONES
- AFTER-SCHOOL PROGRAMS
- FIELDS AND PLAYGROUNDS
- ASSEMBLIES AND SPORTING EVENTS
- FIELD TRIPS
- CLASSROOM COMMUNICATION WITH ADMINISTRATORS AND SECURITY



### TOP 5 WHO RELY ON TWO-WAY RADIOS<sup>1</sup>

- 70%  
PRINCIPALS
- 65%  
MAINTENANCE
- 64%  
SCHOOL BUS DRIVERS
- 58%  
ADMINISTRATORS
- 46%  
SECURITY OFFICERS



## DIVERSE STAFF. DIFFERENT LOCATIONS. ALL CONNECTED WITH INTEGRATED RADIO COMMUNICATIONS.

### SUPERINTENDENTS AND PRINCIPALS

Digital voice and data communications with crystal-clear audio, text messaging and productivity-enhancing data applications. Multi-site trunking system efficiently connects all administrators and staff so they can coordinate districtwide.



### HALL MONITORS AND MAINTENANCE

Compact, rugged portable radios. Digital voice communications with crystal-clear audio that overcomes noisy hallways, loud boiler rooms and bustling playgrounds.



### TEACHERS AND ADMINISTRATORS

Sleek and light digital-capable radios for clear voice and excellent audio. Ideal for coordinating tasks and activating rapid response. Simple, rugged and easy to use.



### SECURITY AND SAFETY OFFICERS

Portable radios with digital voice and data communications. Extremely rugged with crystal-clear digital audio, text messaging and safety-enhancing data applications.



### BUS DRIVERS AND TRANSPORTATION MANAGERS

Mobile radios with digital voice. Crystal-clear audio overcomes noisy environments. Reliable, rugged and affordable. Hands-free accessories for safe communication on the road.



## INCREASING SAFETY AND EFFICIENCY, DOWN THE HALL AND ACROSS THE DISTRICT

Dollar-challenged school districts know that two-way radios are an attractive and affordable solution. They deliver better coverage and clearer voice, a must-have for noisy classrooms and loud buses. Their greater capacity means educators can connect more people – from building to building or throughout a district.

Two-way radios offer advanced features, such as data applications, and integrate with other devices, including landlines, PA systems, wireless call boxes and smartphones. Now if a principal or teacher is off-site at a conference, he or she can connect seamlessly to the school's radio system using their smartphone.

Today more than ever, student safety is a sweeping priority. It's why we work closely with schools nationwide to create safe environments for students and staff alike. Our innovative solutions, robust communication systems and expert partner network can help your district increase the level of safety and efficiency and foster a better learning experience – from the classroom to the stadium to the bus ride home.

### SOURCES

1. Motorola 2013 Nationwide Education Survey
2. "New School Year Brings More Cuts in State Funding for Schools," Center on Budget and Policy Priorities, Sept. 4, 2012
3. "Architecture of School Safety", TriArch, June 12, 2013
4. "Your Guardian Angel", School Transportation News, February 21, 2012
5. USA Today, September 4, 2013
6. Two-Way Radios, [www.gradeschool.org](http://www.gradeschool.org)

To maximize communications for safer schools, talk with your Motorola representative or visit us at [motorolasolutions.com/mototrbo](http://motorolasolutions.com/mototrbo).

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. © 2008 - 2014 Motorola Solutions, Inc. All rights reserved.



**MOTOROLA SOLUTIONS**

Value Added Reseller

**Commenco**

COMMENCO INC  
4901 BRISTOL AVE  
KANSAS CITY 64129  
[www.commenco.com](http://www.commenco.com)  
800-292-9725